

ON THE COVER:

Concrete is poured for the new fishpass structure at Hatchery Creek Falls, Thorne Bay Ranger District, Prince of Wales Island. Photo by Sarah Brandy. Story begins on page 3.

SourDough Notes

Quarterly news magazine for the U.S. Forest Service Alaska Region P. O. Box 21628 Juneau, AK 99802-1628 http://www.fs.fed.us/r10

Fall 2010

Produced by: Regional Public Affairs Office Teresa Haugh, Editor

Submissions:
SourDough Notes is written
for people interested in
the Alaska Region.
Your suggestions, articles, and
photographs are welcome.

Please contact:

Public Affairs Office U.S. Forest Service Department of Agriculture P. O. Box 21628 Juneau, AK 99802 (907) 586-9337 thaugh@fs.fed.us

Acceptance of articles does not guarantee publication.

The editorial staff reserves the right to edit all articles for journalistic standards and space consideration. Articles will be edited to Associated Press style with consideration of GPO guidelines.

INSIDE:

Rock-tober Fest!2	Multi-Agency Efforts25	
Hatchery Creek Falls3	Caribou on Ice26	
Bob Marshall Nat'l Award4	Farewell, Dear Friend27	
Mission at Martin Lake5	Creating A Diverse Workforce28	
Robert Marek: Trailbuilder6	Voices in the Wilderness29	
Rebuilding Dan Moller Cabin8	SCA Interns30	
Outdoor Classrooms9	Fallen Firefighters Memorial31	
How Do We Love the Forests?10	Cordova RD Stars30	
Agglomerating Fecal Material12	Cordova Youths Seek Challenge3	
Getting in Touch/Haida13	Feeling Unmotivated?3	
RF Pendleton at Grand Camp14	Copper River Interagency Study34	
Kasaan Youth Academy16	New Research Facility35	
Returning Home17	Secure Rural Schools Act36	
There's More to Fungi18	RAC Funds Give New Look37	
Dutch Oven Cooking19	Lassie and Friends39	
Healthy Forest/Communities20	Cordova RD Trail40	
Repairing Beaver Lake Trail21	From the Archives41	
Tongass Rainforest Festival22	Kenai Spruce Bark Beetle Project .42	
Hazard Tree Risk Assessment23	<u>iTrec!</u> 43	
Letter to Chief Tidwell24	Pack Creek Tower back cover	

Rock-tober Fest! at Mendenhall Glacier Visitor Center



Photo by Kristi Kantola.

arol Voneida, Regional Visual Information Specialist, dressed up as the local sheriff to volunteer at Mendenhall Glacier Visitor Center's Rock-tober Fest on the Saturday before Halloween. She offered crayons to young visitors at the rock art table and showed them how to transfer petroglyph designs to paper.

The "petroglyphs" were designed by interpretive guide Jane Terry to teach older children how to preserve history and create paper designs without harming the actual rock art. One father said he loved how the rock art activity was used to teach children about the importance of petroglyphs on a level they could understand.

Hatchery Creek Falls—Partially Removable Fishpass

By Sarah Brandy, Fish Biologist, Craig Ranger District

atchery Creek Falls is located about eight miles from Coffman Cove on the Thorne Bay Ranger District, Prince of Wales Island. The Hatchery Creek sockeye run is one of the earliest in southern Southeast Alaska. Fish often come into the system in May, when flows are frequently low. The upper falls, about three miles upstream from Sweetwater Lake, are considered a "partial barrier" to sockeye salmon. During periods of

extreme low or high flows, sockeye cannot surmount the falls; repeated attempts lead to physical stress and an increase in pre-spawning mortality.

For this reason, the Forest Service first considered modification of the falls in the 1970s. In 1981, a contractor attempted to build a gabion weir structure. Three jump pools were created on one portion of the falls, but the structure blew out during high flows the first winter. Fishpass work was not revisited again until 2008.

We began construction of a new fishpass June 3, 2010. This was a high priority project for the forest and region due to the poor sockeye salmon returns in recent years, leading to subsequent emergency closures, both state and federal, of the sport and subsistence sockeye fisheries on Hatchery Creek. First, a coffer dam was built at the top of the falls upstream of the construction area. This diverted water to the middle and left portion of the falls to aid the sockeye in passage during low flows while construction occurred.

The fishpass was built on a side of the falls that was the least passable to sockeye, leaving unaltered



Team members build a form. Photo by Brent Mason.

the areas where sockeye and coho naturally have the most success. The concrete and cedar board structure of the fishpass creates three jump pools, and can be adjusted by adding or removing boards at various flows. The aluminum columns that are bolted to the concrete base walls, which the cedar boards fit into, are removable as well, so that after the sockeye run, all parts of the fishpass can be removed, leaving only the concrete base walls in place.

The grand opening of the fishpass occurred July 7; the coffer dam was removed and water flowed through the concrete and cedar board weir structure. Because the structure is

Construction of the Hatchery Creek Falls Fishpass took:

- 39 days
- 37 people, including Youth Conservation Crews crews from Craig, Thorne Bay, and Kasaan
- Two volunteers,
- The Thorne Bay Fire Module
- 700 bags of concrete
- Over 2,000 pounds of rebar
- Lots of sweat.

adjustable by design, and because of the bedrock controlled hydraulics, we had to do some immediate troubleshooting with the cedar board configuration at various flows. This required the crew to spend time adjusting boards and watching fish navigate into the fish-pass.

The objective was to: a) figure out the best configuration where fish could pass at low flows (i.e., the right jump height), and 2) determine if the water

could bleed off the side, maintaining moderate flow through the fishpass when the flows are elevated.

We determined that 2010 was a great year for the sockeye at Hatchery Creek: 10,389 fish returned. This is up from 660 in 2009, 238 in 2008, and 4,510 in 2007. The fishpass, no doubt, aided in efficient upstream migration, increasing overall escapement. Well over half of the escapement (6,150 fish) came after the coffer dam was pulled and the fishpass was in operation. Two days after opening up the fishpass, 1,600 sockeye, which had been staging below the falls, were counted through the weir (about one mile upstream of the fishpass). This was by far the biggest daily total in 2010. In the four days after project completion, 4,057 sockeye passed through the weir.

Rob Miller, Sitka Ranger District Fisheries Biologist, was the lead on construction. Design plans were developed by Engineering Geologist Bob Gubernick and Structural Engineer Allan Murph. Due to priority ARRA projects, and vacant positions for the zoned Prince of Wales

cont'd on page 4



cont'd from pg. 3

fish program, it was questionable whether this target could be met this year. The work was completed however, thanks to the great determination, persistence, and leadership of the limited fish personnel to complete NEPA work, project planning, design, permitting, logistics, and coordination with the State Department of Fish & Game and Habitat Division. The project was a huge success and an important management measure for this valuable resource. The 68 miles of enhanced/restored streams made up half of the entire Alaska Region's target for streams enhanced/restored for 2010. The hard work by dedicated employees made it happen.

Completed fishpass before water is released. Photo by Sarah Brandy.

Sitka Conservation Society Receives the Bob Marshall National Wilderness Award

By Steve Kimball, Wilderness Program Manager, Alaska Region

hief Tom Tidwell recently presented the Bob Marshall Champions of Wilderness Award to Chuck and Alice Johnstone, founding members of the Sitka Conservation Society. The presentation was at the National Wilderness Awards Ceremony in Washington, D.C. on October 14. Also attending were Andrew Thoms, Executive Director of the Sitka Conservation Society, Carol Goularte, Sitka District Ranger, and Mary Emerick, former Sitka District Wilderness Manager.

The Sitka Conservation Society received the award for working with the Sitka Ranger District to develop a community-based wilderness stewardship program. Over one hundred volunteers collected information on wilderness conditions and visitor experiences in the West Chichagof-Yakobi and South Baranof Wilderness Areas. This raised awareness and appreciation in the Sitka community for these outstanding wilderness resources. This work is being pointed to nationally as a strong model for citizen wilderness stewardship.

Goularte said, "It gave me great pleasure to witness Sitka Conservation Society receiving the Bob Marshall Award. Sitka Conservation Society has been a model partner working with the Sitka Ranger District on a variety of projects for the past several years. Their enthusiasm and grant writing have been instrumental in our stewardship of the Wilderness Areas. Focusing on resource topics of a shared interest inspired a new rela-



Left to right: Deputy Chief Joel Holtrop, Chief Tom Tidwell, Chuck and Alice Johnstone, founders of SCS, Chris Brown, Director of Wilderness & Wild & Scenic Rivers, Andrew Thoms, Exec. Director, Sitka Conservation Society. Photo by Dominic Cumberland.

tionship for the good of a national forest we care about together."

Founded in 1967, the Sitka Conservation Society launched Alaska's first citizen-initiated wilderness campaign to protect Yakobi and Chichagof Islands. Their efforts succeeded when the West Chichagof-Yakobi Wilderness Area was designated as part of the Alaska National Interest Lands Conservation Act of 1980.

Mission at Martin Lake

By Dana Smyke, Maintenance Worker, Cordova Ranger District



Cordova Ranger District's new Panabode cabin on the east Copper River Delta has spectacular views of Martin Lake and Mount Tom White. Photo by Michael Truex.

In June 2010, the Cordova Ranger District replaced the aging public recreation cabin at Martin Lake on the east Copper River Delta. The cabin is very popular with bear hunters in the spring and sought after by fisherman in the late summer and early fall for the silver salmon run. The popularity of the cabin, combined with its ever increasing maintenance costs, put it high on the list for replacement.

During the planning phase, the district decided that the 12x14-foot size of the existing cabin was a little small for the maximum rated occupancy of six persons. So, the district decided to increase the floor plan to 16x20 feet and add an 8-foot covered deck. The cabin was spec'd out and the information sent to purchasing for a contract. A few months later, the Panabode cabin kit was delivered to Cordova by barge. A seamless helicopter sling operation

coordinated by local helicopter foreman Dave Zastrow put the 18,000 pounds of tools and materials at the remote site in two days. Then the fun began!

I joined district cabin crew member Michael Truex and public services staff member Bob Behrends as

we traveled to Martin Lake. There, we noticed the new cabin site. directly adjacent to the old cabin, took advantage of higher, better drained ground to gain views of the lake and the distant 10,000 foot Mount Tom White. Work progressed rapidly as the foundation gave way to the floor and then the walls and roof. The deck was added and roofed, and then came stairs and rails. We gradually transformed the many bundles of materials left in the muskeg by the helicopter into a cabin. The spacious interior was furnished with bunks for six, a table and benches, counters, shelves, and wood and oil stoves. A new outhouse, complete with a clear Lexan roof, was the final touch. The cabin was completed over three nine-day spikes. Total construction time was 21 days with six days spent preparing the site, slinging materials and removing the old cabin.

The spacious new cabin, with world class views and access to beautiful country, is sure to please future visitors to this hidden corner of the Chugach National Forest.



The new interior has bunks for six, as well as oil and wood stoves. Photo by Dana Smyke.

Robert Marek: Trailbuilder, Philospher

By Teresa Haugh, Editor

his summer I was fortunate to be able to join John Neary, Wilderness Field Manager, Admiralty Island National Monument and Juneau Ranger District, on a field trip to visit the Southeast Alaska Guidance Association (SAGA) crew at Mole Harbor. This location on Admiralty Island is famous as the homestead of Alan Hasselborg, the original "bear man of Admiralty" and the subject of a biography written by John Howe.

The crew was funded through an Economic Recovery Act grant to rebuild sections of the cross-Admiralty canoe route, which is a National Historic Register-listed series of trails and shelters that stretches all the way from Mole Harbor to Angoon. The SAGA crew's work began a few hundred yards beyond the shelter in the photo on the right.

As I hiked up the trail, following the sounds of hammers and saws, I was stopped by a stream and a small pool that intersected the trail. There, I met Forest Service employee Robert Marek. He was building a set of stairs across the stream and up the bank on the other side to provide safe portage for hikers and their canoes. He was busy swinging an ax, notching logs, taking measurements, and philosophizing about the wilderness, the trail system, and working for the U.S. Forest Service.

I soon learned that Marek was overseeing not one, but three SAGA crews, as well as one Forest Service crew working on trails and cabins on Admiralty. With two months still to go before the summer was over, Marek had already made 52 float plane trips from Juneau, to and around the island. "It's a tremendous work load," Marek said, "because the logistics are just mindboggling. I can schedule flights, but the weather dethrones them."



Robert Marek decides where to place a notch.

Like the rest of the crews in the wilderness, Marek was working without the aid of power tools. "I'm spiking these runners to the sill logs," he said. "You have to Lincoln-log it, but you still want to use spikes. I pre-drill it (with a hand tool) so it's not so difficult. I use 12-inch galvanized spikes in lieu of pieces of rebar, which has burrs on the end."



Shelter at Mole Harbor

I admired Marek's work while he talked his career. He didn't slow down—he would soon be off to his next location. "I don't like to wear gloves when I work," he said. "I like to feel the product I'm working with. Since these stairs have a 30% slope in a short span, I'm making nine-inch steps."

He described his résumé as "all over the map." In his first volunteer job with the Forest Service in 1988, he worked on the Mill Creek Fish Ladder at Virginia Lake in Wrangell. He came back as a paid assistant the next summer and continued building fish ladders through the

early '90s. He eventually got a permanent job with the National Park Service to construct trails. In all, he has spent 20 years doing this type of work.

In Tucson, Arizona, Marek did more stonework than woodwork. He was proud of the masonry work he did in Yosemite National Park, which is world-renowned not only for its natural beauty but for the rock work that's done there. He said he felt privileged to leave his thumbprint among all the other masons who have worked at Yosemite over the years. He prefers stones for trails because of their longevity, and lamented that most of the woodwork in Southeast Alaska has a lifespan of about a dozen years. He said, "I can look at stonework built eons ago and know who built it. Craftsmen develop trademarks on their work. I'm sure

it's the same with totem carvers. It's a human trait that we all have to want to take ownership in what we do. We want to be able to say, 'that is my style.' And I capitalize on that when I'm working with a crew. It's what motivates us to do a good job. When someone is just working for a paycheck, their work is sloppy."

Trail building seems

to be an unusual career for someone who graduated with a finance and accounting degree. But like the young adults he now supervises, Marek joined an SCA program right out of college, working with the Park Service as a wildland firefighter. He said the work is much more satisfying than sitting in front of a computer.

Working on the Tongass National Forest presents its own challenges, Marek said. "You don't have a soil type here that is like anything in the Lower 48. You have to be cognizant of what you are using for materials. Down south, rocks and gravel are a lot more attainable. You don't have to be as concerned about the root mat and hanging on to what you've got and not digging too deep. The Tongass is one of the most difficult places to build a trail. The environment doesn't lend itself very well to the normal trail building standards that most people are familiar with down south."

Marek stopped, took some measurements, muttered under his breath, then continued his narrative. "The rain is a huge problem," he said. "You are building on top of sponge. You have to think about how deep you have to go. It's not always wise to build a drain because you can tear up the root mat.



Robert Marek uses trail building techniques honed over two decades.

You have to adapt your trail building skills to the particular use the trail is going to receive. Is the trail going to get a lot of use? You have to weigh it out. Learning along the way never gets old for me."

Marek swung his hatchet, praising it for its long handle that allows for a solid, firm swinging stroke. He vowed to get similar hatchets for the other Forest Service trail crews. He talked about wilderness values, saying,



Robert Marek finishes his stairs on the cross-Admiralty canoe route.

"Some people frown on our work. They think even minor trail improvements don't belong in the wilderness. I thought everyone would be pleased we are building a trail. There is so much discussion."

Holding his breath, Marek turned his log over to see if the notches are the right depth. "Some users like rustic," he continued. "They like cab-

ins the way they were. They don't want the oil stoves, they want the old wood stoves. Everything is a hot button issue."

I nodded in agreement, yes, the topics are controversial.

We paused as John Neary and SAGA Director Joe Parrish arrived to check out the progress.

"Don't stand there too long," Marek told them. "You'll grow roots. And don't tell the SAGA crew it's less buggy here at the stream."

Marek positioned his log. "What? Perfect! Everything lines up. That's a real purty notch."

Yes, it was a beautiful notch, we agreed.

"I need that bit driver that someone walked off with," Marek said to no one in particular. "Boom, boom and I'm outta here. I'm off to North Young on Monday. Wednesday I'm off to Hasselborg Lake. It's a killer pace this year, and it's the crux of the season."

We left him to meet his deadline, and moved on toward the beach.

John Neary summed it up well when he said, "Robert's love for his work is evident not only in the quality of his work, but also the enthusiasm he exudes. He has found his niche and makes the most of it every day."

Rebuilding Dan Moller Cabin

By Ed Grossman, Recreation Program Manager, Juneau Ranger District

an Moller Cabin, or Third Cabin, was one of three shelters built along the Douglas Ski Trail on Douglas Island, near Juneau, Alaska. Dan Moller, a Forest Service employee and founding member of the Juneau Ski Club, supervised the construction of the Douglas Ski Trail by the Civilian Conservation Corps. The CCC completed building Third Cabin in December 1936, and the Juneau Ski Club was given exclusive use and maintenance responsibilities. Cabin fees were 25 cents for day, and 50 cents for night use.



The new roof peeks through the trees. Photo by Scott Jackson.

With the completion of the trail, shelters, and the Juneau-Douglas Bridge, hundreds of people flocked to the slopes each winter. Rope tows were eventually replaced by a Tucker Snow Cat named "Oola the Juneau Ski Train," in the 1950s. Oola could tow a sled with as many as 40-50 skiers up the hill. The Douglas Ski Trail remained a regional favorite until Eaglecrest Ski Area opened in 1976. The Eaglecrest drainage was developed over the Douglas Ski Bowl because it was easier to build an access road in that drainage.

Third Cabin was a vertical log structure made of on-site materials.

This design turned out to be a poor choice because in our wet climate water runs down the vertical walls and accumulates at the bottom, wicking up into each individual log. Huge snow loads of 20-30 feet each winter would also encase the cabin, press up against the structure, and melt into the walls. Rot became a

very problematic enemy of this vertical wall design. In the 1980s and

'90s, major attempts were made at salvaging the structure. Walls were jacked up, rotted log segments cut out, foundations built, and treated lumber sills installed. Nonetheless, rot returned extensively within a decade.

This summer the old structure was removed after detailed documentation, and

salvage of artifacts for the Juneau-Douglas City Museum. Oregon Woods was awarded the contract to

replace the cabin, and they had the yellow cedar cabin kit fabricated by Tongass Forest Enterprises in Ketchikan.

The new cabin is a beautiful sight in a spectacular setting. The cabin is spacious at a story and a half tall,



View from the inside of Dan Moller Cabin. Photo by Scott Jackson.

and 16x20 feet in size. For longevity, the structure has been specially engineered to withstand significant snow loads, and to reduce the amount of wood destroying moisture reaching the walls. Although the character of the original cabin has been lost, an interpretive panel will inform the new generation of cabin patrons of the colorful history associated with the area.

Next time you are through town, consider renting the cabin and grabbing some ski gear. Since Oola is no longer available for transport, you will have to hike the three miles to alpine along Dan Moller's trail. I can tell you, in his stead, that it remains worth the trip.



Historic photo shows the ski train on Douglas that could carry as many as 50 skiers up the hill at a time.

Outdoor Classrooms

Watershed Education Becomes Gateway to Citizen Science

By Ruth D'Amico, Fishery Biologist, Chugach National Forest, Kenai Peninsula Zone

The Chugach National Forest is focusing on watershed restoration, especially on the Kenai Peninsula, where many salmon streams have some form of channelization that has led to the degradation of salmon habitat. One restoration project was completed at Daves Creek at the outlet of Tern Lake in Moose Pass, Alaska at the intersection of the Seward and Sterling Highways.

Phase one of the project was to replace an undersized culvert with a bridge to allow passage of adult and juvenile salmon. The stream was relocated from an incised highway ditch channel to a meandering stream with a reconstructed flood plain. Since the Daves Creek location is accessible, it easily lends itself for educational purposes. Recently, I joined Kathleen Toth-Stauble, Conservation Education Specialist, on a visit to Daves Creek with fifth-graders from Seward Elementary School. At the creek, the students learned about the restoration work that was done and the resulting increase in fish habitat.

This site visit has inspired the Seward Elementary School to participate in the Adopt-A-Stream program within the Seward city limits. The school requested assistance from the Forest Service to help develop a monitoring protocol and teach the students about what to look for in a stream. Forest Service personnel assisted the school in acquiring a State of Alaska Fish Resource Permit so the students can set minnow traps and identify juvenile fish in the stream. We also purchased water quality test kits for the students to use to monitor dissolved oxygen, pH



Fifth-graders from Seward Elementary School look for macroinvertebrates at Daves Creek. Photo by Katy Toth-Stauble.

levels, fecal coliform, and macro-invertebrate samplers.

The students monitor the creek one day a month with the assistance of Forest Service personnel. The monitoring work has inspired the students to ask their teacher, Mary Lynn Barnwell, many daunting questions; so, I agreed to come to the classroom and help out. I fielded many questions in an hour asked by students wanting even more information about the fish stream. Since then, the students have begun interviewing residents along the stream and submitting articles to local newspaper to raise awareness about importance of fish habitat.



Ruth D'Amico with juvenile fish caught in minnow traps. Photo by Katy Toth-Stauble.

The Moose Pass Girl Scouts joined staff from the Chugach National Forest September 25 to celebrate National Public Lands **Day**. At Tern Lake, they learned about ecosystems, earned badges, and assisted in revegetating a newly restored stream bank. At the lake, the girls learned about living and non-living ecosystems, and went on a scavenger hunt to find things that did not belong in the ecosystem, such as egg cartons, soda pop cans, and chip bags. The troop decided to spend some of the proceeds of their annual cookie sales to design and install an interpretive sign about the restoration that occurred on Daves Creek in Moose Pass.

While Karen Kromrey, Public Services Staff Officer for the Seward Ranger District, was on hand to assist with marking the trail for a scavenger hunt, I waited for the girls at the end of the trail. There, I talked with them about the living organisms in the lake, showing some juvenile fish caught in minnow traps. We looked at threespine sticklebacks, Coho salmon, and rainbow trout. The girls even had a chance to watch spawning Coho salmon in Daves Creek. We finished by walking along the creek and scattering birch seed along the stream bank.

How Do We Love the Forests? Let Us Count the Ways

By Susan J. Alexander, Ph.D., Regional Economist, Alaska Region

illions of people enjoy their national forests each year. Accurate information about the amount of recreation occurring on National Forest System lands is necessary for many reasons, including forest planning and budget allocation, and is required by Executive Order 12862 (Setting Customer Service Standards).

Prior to the mid-1990s, the Forest Service used the Recreation Information Management (RIM) system to collect and assess

recreation use information. Forest managers often lacked the resources to both manage recreation facilities and monitor visitor use following RIM protocols. Plus, both the U.S. Congress and the General Accounting Office questioned the credibility of recreational visitation estimates reported by the Forest Service.

In response to these issues, the National Visitor Use Monitoring (NVUM) system was developed. Information gathered using NVUM helps the Forest Service address strategic and annual performance plans, which require the agency to measure trends in user satisfaction and use levels. The data also assist Congress, Forest Service leaders, and program managers to make decisions that best serve the public and protect valuable natural resources by providing science based, reliable information about the type, quantity, quality and location of recreation use on public lands. Recreational use information is also important to many other users, including state agencies and pri-



A recreation user pauses to participate in a survey to assist forest managers in planning and budgeting for recreation use on national forests.

vate industry. NVUM methodology and analysis are explained in detail in a 2002 Southern Research Station publication titled "Forest Service National Visitor Use Monitoring Process: Research Method Documentation" by English, Kocis, Zarnoch, and Arnold. ¹

NVUM sampling began in Alaska and other regions in 2000. The first four-year sampling cycle was completed in September 2003. The second sampling cycle, which began in October 2004, was completed in September 2009 (subsequent cycles last five years). Issues with recreation sampling became apparent after the first round of NVUM sample. No interviews or pre-work were done in 2006 while the regional office and the Pacific Northwest Research Station worked on the problems. The results of an analysis² by Eric White and Joshua Wilson were used to modify pre-work in 2007, which included an assessment of how to choose recreation sites for sampling. Interviews for

Round 2 were completed in 2008 and 2009. White also helped the region develop an Alaska-specific supplemental survey that is added to one-third of the NVUM main surveys. So far, Alaska is the only region that has taken the opportunity to gather extra information with the NVUM survey on recreation visitor behavior specific to the region.

Eric White and Dan Stynes wrote a 2010 report entitled, "Characterization of Resident and Non-resident Visitors

to Alaska National Forests."3 This report was based on a study of expenditure profiles in the region as well as supplemental survey results for 2008 and 2009, matched to the basic NVUM survey responses. The objectives of the research were: to characterize the use of rented vehicles and guides/outfitters by visitors; to quantify the mode of transportation and numbers of nights spent in the region by non-residents; to better describe the recreation behavior and use of boats and planes by Alaska residents; to characterize visitor spending and the associated economic multipliers associated with Alaska recreation; and, to determine the utility of continuing to implement the supplemental survey.

The supplemental survey results from these two years are preliminary, as there are some districts on the Tongass National Forest that were not sampled in 2008 and 2009. However, we can see some trends from the analysis, and compiled some great information. White and

Stynes estimated 33,000 annual vehicle rentals are associated with recreation on the Chugach National Forest. Vehicle rentals help boost local economies. Also, the majority of non-resident visits on the Chugach involve the use of a guide or outfitter. This is also a big help to local businesses. Most non-residents (81%) come to the Chugach via air.

Non-resident visitors to the Tongass arrive by cruise ship (49% of the sample), ferry (24%) and air (24%). The data on the Tongass could shift some as we assess more Tongass ranger districts, but this gives us a pretty good idea as to differences in how people travel. Non-resident visitors to Southeast Alaska tend to stay in

Southeast, whereas non-residents visiting the Chugach National Forest travel more throughout Alaska.

Half of Alaska residents surveyed who live in Southeast, and 21% of residents living in Southcentral reported using a boat or plane to access the national forest in the last year. This is quite different from how national forests are accessed in other states, and is one reason recreation sampling in Alaska can be so difficult. The national NVUM survey gives estimates of recreation visitation to the Chugach National Forest of 498,345 annual visits, and to the Tongass, 1,885,513 visits. Using information gathered in the supplemental survey, White and Stynes have calculated a revised visitation estimate of 2,337,981 annual visits to the Tongass National Forest due to the previously unknown travel to via boat and plane.

Dollars spent per trip by recreation visitors				
	Non-residents	Residents		
Chugach	\$319	\$55		
Tongass	\$342	\$46		
Jobs supported per annual visits				
	No. Annual Visits	Direct jobs	Total jobs	
Chugach	498,345	827	1,093	
Tongass	2,337,981	3,210	4,113	

White and Stynes state, "The data collected via the supplemental survey provided information on the characteristics of resident and non-resident visitors to Alaska national forests that we were previously unable to quantify via NVUM sampling. Many of those visit characteristics relate to unique features of national forest recreation



Strategically placed signs ask for visitor participation in NVUM surveys.

in Alaska. Based on the analyses here, it is very useful to continue administering the supplemental survey in R-10. In the short term, continued use of the supplemental survey will provide data to substantiate or update the estimates we have reported. Over the longer term, the data from the supplemental survey can be used to identify any changes in behavior over time—such as changes in the propensity for using guides or outfitters or changes in the use of boats and planes by Alaska residents." ⁴

The national NVUM survey will be submitted to the Office of Management and Budget for approval in 2012. At that point, we can modify the Alaska Region supplemental survey and take into account suggestions for improvement, and possibly include new questions we find we need to improve recreation management in the Alaska Region. Eric White, Joshua Wilson, Dan Stynes, along with numerous employees from the regional office and Chugach and Tongass national forests dedicated time and effort to collecting this information, assessing the data and assisting in the process. Everyone involved in NVUM should feel proud of the quality of information that has resulted from the survey. We are able for the first time to estimate Alaska-specific economic impacts from recreation visitation, and improve our visitor estimates based on new information about how people travel to the national forests for recreation

¹ http://www.fs.fed.us/recreation/programs/nvum/

² http://www.fsl.orst.edu/lulcd/Publicationsalpha_files/White_Wilson_gtr740.pdf

³ <u>http://www.fs.fed.us/r10/ro/recreation/</u> under "Special Interest"

Agglomerating Fecal Material

By Ed Grossman, Recreation Program Manager, Juneau Ranger District

t is a simple fact that we all gotta go. Thanks to modern sewage systems, "it" (human waste) goes away with a flush and is properly treated en masse. When one leaves a population center, however, dealing with "it" can be tricky.

On the Tongass National Forest, there are over 150 cabins available for the public to rent, and all have an associated outhouse for when nature calls. This centuries old way of dealing with human waste works well at low use sites, places with deep soils, and areas that are a bit drier than average. When use increases, or the site is rocky or wet, outhouses become problematic.

On the Juneau Ranger District we have five cabins that exceed 150 nights of use a year. Some are adjacent to lakes, and we all know "it" goes downhill, ironically putting at risk some of the very water bodies we have encouraged people to come and enjoy. Other cabin sites are in the alpine where water intrusion and shallow soils are problematic when trying to locate outhouse sites. When outhouse holes fill up, and new pits are dug, the outhouse building needs to be moved, and new access needs to be built to the new outhouse location. Over the years it becomes difficult to find new suitable locations within a reasonable distance of the cabin.

To address these issues, about five years ago Juneau Ranger District cabin's crew leader Rob Morgenthaller, embarked on an experiment. He installed a solar power enhanced vault outhouse system at Windfall Lake Cabin (heat helps evaporation reducing volume). This cabin sees the highest use of any cabin on the Tongass, and furthermore, it sits on the shoreline of the lake. The vault was pumped for the first time in

2008 after three years of heavy use. A three-inch diaphragm pump fitted with two 25 foot hoses was employed to empty the vault into barrels. When the complement of barrels is full, they are flown by helicopter to a road head and a septic truck pumps out the material, cleans the barrels, and properly disposes of the waste. The consensus was our overcast, wet and cool rainforest climate rendered the solar assist useless, but the rest of the experiment went off without a hitch.

In 2006, being a bit skeptical of the vault system, Rob began a second experiment building an elevated outhouse at Dan Moller Cabin. This cabin, on Douglas Island, is a high-use cabin located

in the sub-alpine where the site has shallow, wet soils. A series of barrels are stored underneath the elevated outhouse, and rotated on wheels as they fill up. As described above, when the complement of barrels are full, the barrels are flown out and the contents are disposed of properly. This system has worked very well, but it requires some pretty good guess work on when to hike into the cabin and rotate the barrels. If you hike in too soon, you have wasted a trip. Too late, and you have a mess on your hands—literally.

In Rob's opinion, the vault system has proven to be the way to go (so to speak), less the solar panels. The system has worked so well, that vaults are being installed at John Muir and Peterson Lake cabins, and the origi-



L-R Hans vonRekowski (Tongass NF Developed Recreation & Trails Program Manager), Rob Morgenthaller (Juneau Ranger District Cabins Specialist), and Mike Hulett (RO Operations Staff) discuss the benefits of a vault toilet.

nal barrel system at Dan Moller Cabin will switch to a vault as well.

We realize these vault toilet systems only make sense for areas where helicopter access is safe and economical, septic trucks are available and can be staged close by, cabin use is high, and outhouse relocation sites are limited and/or threaten water quality. If all these conditions exist in your area, you may wish to consider this conversion.

Rob jokes about these projects becoming his legacy, something he did not foresee years ago. I tell him I realize it is a "you know what" kind of job, but he should be proud to know we all appreciate his efforts that recognize the importance of keeping our recreation sites and water bodies clean and free of contamination.

Getting in Touch with the Haida Culture

By Heather Halvorsen, Volunteer, Craig Ranger District

Totem Pole Raising Ceremony

T twas unusually sunny and warm in Hydaburg, Alaska. People were standing around in T-shirts and pieces of traditional regalia, waiting and watching. They had traveled from all over Prince of Wales Island and beyond for the 2010 Culture Camp and Totem Pole Raising Ceremony. A deep sound of chanting could be heard from the street as it rose up with the beating of drums and the heavy plodding of feet. The first of two totem poles had nearly reached Totem Pole Park.

The restoration project of four totem poles began in February 2010. The five-month project was completed with the help of many master carvers, including David "Joe Bush" Frisby, Warren Peele, Joseph Young, T.J. Young, Clarence Peele, and their apprentices. Members of the Kasaan Youth Academy (a youth employment preparedness program) and the Prince of Wales Island Youth Conservation Corps spent a day working with the totem carvers. The young people learned about the history of each pole, its origin and the significance these pieces held for local community members.

On July 31, the first of two poles to be raised was carried from the carving shed to Totem Pole Park by men of Hydaburg and surrounding communities. As the men packed the heavy pole to the park, followers shouted encouragement and applauded them for their hard work. Singers raised their spirits with enthusiastic Haida songs as onlookers took pictures to capture those meaningful moments. The second pole was packed and raised in much of the same fashion; however, this time the women carried the pole. They proved themselves to be just as intense and hard working as the men.

Once the poles were raised, everyone gathered for dinner. Dancers came from Klawock, Ketchikan, Haidagwaii in British Columbia, and of course, Hydaburg. Representing their communities as well as their culture, the dancers moved with exquisite precision and grace.

Many staff members from the Craig and Thorne Bay ranger districts helped carry and raise the new totems. Seasonal staff members, as well, took advantage of this opportunity to immerse themselves in this cultural event, lifting and sweating alongside locals, sharing in a traditional feast and enjoying hours of dancing

Men from Hydaburg and other communities prepare to carry a totem pole for the raising ceremony.

2010 Culture Camp

The Haida Corporation, Haida Community Association and the City of Hydaburg organized a Culture Camp for youth held July 26-28, 2010. The camp was designed to teach today's youth about the history and culture of the Haida Tribe. Kids were taught how to make leather crafts such as a rattle out of cockle shells and rocks, medicine bags, and more. They also learned how to do cedar weaving, paddle making, drum making, blanket making, berry picking and jam making.

Through drawing, singing, and dancing classes, the kids were allowed to show their creative sides while learning about their culture and their heritage. Booths with information on nutrition offered kids a look at how and what it means to be healthy. Two very important classes at the camp were instruction in Haida protocol and language. Fisheries biologist Brandy Prefontaine hosted a booth to help students connect their cultural heritage to the Tongass National Forest. Strength and respect were emphasized during the camp's teachings and were taught to the children in Haida.

A picnic was held July 29. There were various games and a closing bonfire to celebrate the end of the camp and to congratulate the kids and teachers for their hard work and effort.

Tony Christianson, Mayor of Hydaburg, remarked on the success of the culture camp and the totem pole raising ceremony. Through the time and effort put in by many, the successful events took place without incident, and left many eager to continue the work to replace the older poles in the future. "We are happy to continue to get support from the community," Christianson said.



Regional Forester Beth Pendleton at the 98th ANB & ANS Grand Camp Convention

By Lillian Petershoare, Tribal Government Relations Specialist, and Teresa Haugh, Editor

Regional Forester Beth Pendleton to get her perspectives on the Alaska Native Brotherhood and Alaska Native Sisterhood 98th Grand Camp Convention in Saxman in October. ANB-ANS is Alaska's oldest Native association, and the largest in Southeast Alaska. Over the years, Alaska Regional Foresters have welcomed invitations to take part in Grand Camp, and as the newest RF, Pendleton was no exception.

"I felt very privileged to be invited," Pendleton said. "It was wonderful to present regional updates at Grand Camp. It was important for the Forest Service to be there."

With ANB Grand President Willard Jackson's support, Pendleton invited Sitka Tribe President Woody Widmark, Acting Deputy Regional Forester Rebecca Nourse, and Subsistence Coordinator Steve Kessler to join her. Pendleton told the Native community that she was deeply aware that the policies and actions of the Forest Service could affect Tribes in Southeast and Southcentral Alaska.

Pendleton said, "We are the primary land manager in Southeast, and these are the indigenous lands of the Haida, Tlingit and Tsimshian." And there is a lot of land to manage: 22 million acres in the Chugach and Tongass national forests. The Tongass covers more than 80 percent of the land base in Southeast Alaska. The resources on the Tongass are central to the identity and health of Southeast communities.

The importance of the land and its resources to the Native people was reflected in the theme for this year's Grand Camp: "Our Food Is Our Way of Life." The issues



RF Beth Pendleton with husband and wife team Richard and Janice Jackson, newly elected heads of the grand camps of the Alaska Native Brotherhood and Alaska Native Sisterhood. Pendleton was invited to wear the beautiful green and brown blanket commissioned by ANB/ANS Grand Camp to honor the Forest Service's Centennial in 2005. The blanket remains on display at the Southeast Alaska Discovery Center in Ketchikan.

surrounding subsistence management were a big part of the discussions. The Regional Forester is the Secretary of Agriculture's representative on the interagency Federal Subsistence Board which oversees most of the regulatory process for subsistence in Alaska.

"There is so much that can be added [to the discussion on subsistence] from the Native perspective," Pendleton told us. "We need their understanding of the land, the issues, and the needs of the people for maintaining and cultivating their subsistence way of live. It is important for us as federal land managers to incorporate their traditional ecological knowledge into our management."

Pendleton said there is still work to do. She said all parties need to have

a better understanding of the subsistence program and the investments that are being made to support the subsistence way of life and assure the resources are healthy and available.

"The most important way to build bridges is to actively engage in dialogue and discussion. Face-to-face time is important. People need to get to know one another. People won't always agree, but we must build a relationship of mutual trust and respect, and let people know our intent is sincere," she said.

Pendleton also talked about jobs, sustainability, and economic development in Southeast Alaska. Secretary of Agriculture Tom Vilsack directed USDA agencies, led by the Forest Service and Rural Development, to develop a strategy known

as the Transition Framework to assist Southeast Alaska communities in transitioning to more diversified and resilient economies. Components of the transition include renewable energy, forest restoration and young growth management, fisheries and mariculture, tourism and recreation, and subsistence.

Pendleton shared that the Alaska Region received more than \$44 million in Economic Recovery and Reinvestment Act funding for road maintenance, construction and decommissioning, hazardous fuels reduction, weed management, fish passage improvements, watershed restoration, abandoned mines clean-up, trails and recreation, facility construction, and building safety and maintenance. This work will result in vigorous and healthy timber stands that are more resistant to disease and insect attacks. Road maintenance will provide access for future treatments, recreation, and subsistence use.

Pendleton shared with convention delegates that Forest Service managers have a wonderful tool to aid in consultation between the Forest Service and the Native communities. The Alaska Tribal Leaders Committee, which consists of the RF's executive leadership team and four tribally elected delegates (Woody Widmark with Sitka Tribe of Alaska, Richard Peterson with the Organized Village of Kasaan, Sasha Lindgren with the Kenaitze Indian Village and Mark King with the Native Village of Eyak), are continuing to meet and discuss ways to improve consultations and further partnerships. One desired outcome of the collaboration is to increase the number of Alaska Natives working for the Forest Service. "We have to start with those programs that are reaching out to youth in grade school, middle school, and high school,"



Delegate Al McKinley shows Subsistence Coordinator Steve Kessler how to dance.

Pendleton said. "We need to get youth involved in outdoor activities, getting them on the national forests, perhaps helping with some inventory or monitoring work." She would like to further opportunities for hiring students through the SCEP (Student Career Experience Program), STEP (Student Temporary Employment Program), and ANSEP (Alaska

Native Science & Engineering Program) programs. "I am deeply committed to increasing the number of Alaska Natives employed by the Forest Service as managers of public lands. I fully support career and educational opportunities for Alaska Native youth," she said.

Pendleton summed up some of the highlights of the 98th Grand Camp. "I had the opportunity to see firsthand how they run the camp," she said. "I was amazed at the order and the civility. It was a very formal event, steeped with respect and honor for the participants, particularly the elders. Even though the Forest Service had some

tough things to talk about, our remarks and the dialogue that followed were respectfully received. That was appreciated, and a lot was accomplished."

Pendleton also enjoyed her conversations with Native leaders Richard Jackson, Willard Jackson, and Bob Loescher. Her favorite encounter, however, was with the 102-year-old Dr. Walter Sobeleff. She said, "I met his son years ago, and I told

him, 'I would really like to meet your dad.' I have read many of Dr. Sobeleff's editorials in the newspaper and some articles he has written. He is such an amazing man and he has such dignity. And he is a kind person, too. He is able to convey important issues with respect. It was a great honor to meet him and see him dance."



Barbara Blake, with the traditional hat, represents the Department of Agriculture, Tribal Affairs. Her mother joins the fun.

Introducing the Kasaan Youth Academy

By Paul Dawson with Victoria Houser, Craig Ranger District



Two Kasaan youth use a crosscut saw in the Karta River Wilderness. Photo by Paul Dawson.

hey begrudgingly dragged themselves out of bed and met me at the Kasaan Library at 8:00 a.m. I had to hear the complaints about this distasteful and inhumane hour of the morning and gripes about today's planned project, while I asked if they had their lunches packed and water bottles, with water in them. This was followed by sighs of disgust at being asked such juvenile questions, and also followed by a dash home to grab the aforementioned water bottles. I stood there waiting, knowing that they would be there today, tomorrow and for the next two months, full of angst, enthusiasm, hard work and a bashful enjoyment for what they are doing for themselves and their community.

The Kasaan Youth Academy, a youth employment and job preparedness program, was developed through the combination of a Forest Service Diversity Grant and grants acquired by the Organized Village of Kasaan. The youth participants were hired as part of the Youth Conservation Corps program this past summer.

Youth who live on rural Prince of Wales Island often experience barriers while trying to find employment. The Youth Academy gave them on-the-job experience with the Forest Service through the YCC program and knowledge about future careers. The students not only worked on resumes and job interviews, but also learned about the rich culture of POW Island. The students and their leader were responsible for completing a number of distinct projects, some on National Forest System Lands and others in their own community.

The Kasaan Youth Academy YCC worked all over the island. The crew installed signs at Salt Chuck Mine warning against traditional subsistence collection in the waters near the mine due to the large amount of heavy metals from mine tailings. They also worked at the Kasaan Totem Park, the Clan House built by the Civilian Conservation Corps in the late 1940s, and the historic graveyard. They completed work on the Clan House trail which included raking, brushing, weed whacking and overall clean up. The students built a kiosk and a set of steps for the Kasaan Totem Trail. One could see that the work performed in their home community instilled a sense of pride in the youth participants. Throughout the rest of the eight-week program, they built a woodshed at Trollers Cove Cabin, helped out with the building of Hatchery Creek Fish Pass, and built benches along the newly reconstructed One Duck Trail.

When the concept of the Youth Academy was first considered, Village leaders agreed that they wanted the program to have a cultural aspect and encourage a sense of place in the young participants. They chose the Karta River Wilderness Area as the first work site because it is a traditional and current site for subsistence harvest. The area is now managed as a designated Wilderness Area; therefore, the use of motorized and mechanical equipment, generators, and even wheelbarrows are restricted within Wilderness boundaries. The traditional users and the Forest Service have not always agreed on the management of this important subsistence resource, but through the Youth Academy Program, both governments were able to support the youth participants and their projects in the Karta River Wilderness Area.

The Kasaan Youth Academy YCC crew spent a few days at the Karta River Cabin, where they practiced



Students rest on the benches they built at One Duck Trail. Photo by Paul Dawson.

Leave No Trace skills, and discussed management philosophies in Wilderness. The youth participants were able to share their cultural perspective. The crew used hand tools and minimum impact techniques to complete a section of trail reconstruction, minor cabin repairs,

and to fill the Salmon Lake Cabin woodshed. Wilderness monitoring was performed by the group, and the information was recorded in the national database and used to meet objectives of the Chief's 10-Year Wilderness Challenge.

At the end of eight tough weeks

of work, the teens were still grumbling each morning, and I still shared my lunch when they forgot theirs. But they were still there, and wished they could stay longer. Each of their sarcastic jabs and long, emphatic sighs seemed to say, "I love to hate this. Let's do it again."

Returning Home

By Myra Gilliam, Archaeologist, Admiralty National Monument, Juneau and Yakutat Ranger Districts

n 1986 the Hubbard Glacier, about 30 miles north of Yakutat, Alaska was advancing. A glacial moraine dammed Russell Fiord, creating a lake behind the moraine. The lake was expected to continue to fill with both precipitation and glacial runoff and then overflow. In August the lake level was increasing up to a foot a day with the overflow predicted to flood the Old Situk River floodplain and then the main-stem Situk River, significantly altering adjacent rivers and lakes including the Situk River, Lost River, and Tawah Creek watersheds. The Situk River was predicted to change from a clear and stable river to a large unstable glacial river with the average flow predicted to increase by a factor of 37. The water temperature would decrease while turbidity increased and the average width of the river would increase from 25 meters to up to 2,500 meters.

The agency needed to consider the effects to archaeological sites within the predicted flood path. Stan Davis, Forest Archaeologist, was joined by Frederica deLaguna, a pioneer in documenting the cultural history of Yakutat. Together they relocated and evaluated archaeological sites that would potentially be affected. Their work resulted in the identification of 13 prehistoric and historic sites within the potential flood path. Two village sites were identified for excavation and extensive data recovery.

Three seasons of field work from 1986 to 1988 by large crews resulted in Davis' dissertation *The Archaeology of the Yakutat Foreland:* A Socioecological View (Davis, 1996). Karen Swanson-Iwamoto, Risa Carlson, John Autrey, and Martin Stanford, who assisted in the work, are still on the

Tongass. The archaeological work, supplemented by Tlingit oral histories, resulted in a more complete understanding of the past human relationship with the Yakutat Forelands. We know that the two village sites excavated were occupied between 1,100 years ago until approximately 1840. Davis documented that the inhabitants at these ancient sites adapted to a dynamic environment and changing landscape over time.

Over 7,000 historic and prehistoric artifacts and scientific samples were recovered during the excavations. Historic artifacts include glass beads, iron and copper metal implements, ornaments and ceramics. Prehistoric artifacts include flaked, chipped and ground stone tools including points, awls, mauls, blades, and adzes. Addition materials included basketry and spruce root cordage. Some human skeletal remains were recovered as were some cremated remains from the villages.



Left to right: Elaine Abraham, Lee Benson, Eli Hanlon, George Ramos, Judy Ramos, Maka Monture.

The Native American Graves Protection and Repatriation Act was signed into law in 1990 and provided for the repatriation of the remains excavated in 1987. The Yakutat Tlingit Tribe requested the repatriation of the human remains and the funerary objects in June 2010. On August 31, an Eagle from the Teikweidí Kwáan, a Raven from the L'uxnax.ádi Kwáan and a cultural representative from the Yakutat Tlingit Tribe came to Juneau to pick up the remains of their ancestors. They also looked at some of the excavated Yakutat artifacts stored in Juneau. With great pleasure we listened to elders speak in Tlingit about the names for artifact types and how the stone tools might have been used. The Forest Service will fund construction of two bentwood boxes for the reburial of the human remains and recovered objects to be buried at the Yakutat Cemetery. The people from these two ancient sites will be returned home after 23 years.

There is More to Fungi Than Meets the Eye

By Karen Dillman, Ecologist and Dennis Landwehr, Soil Scientist, Tongass National Forest



Kelly Aho, Steve Trudell, Mike Castellano, Dennis Landwehr and Amber Larsen hunt for mushrooms on Mitkof Island. Photo by Karen Dillman.

bewildering variety of fungi are a significant portion of the biodiversity on the Tongass National Forest. Lichens draping the canopy or conks dotting the tree trunks and downed logs are visible all year long. But the vast majority of fungi remain hidden from view as they carry out their essential ecosystem tasks. Among these, however, are many that produce large fruiting bodies, such as mushrooms, on the soil or forest floor liter and that, for a short time, provide evidence of their existence. Late summer and fall are the seasons to find the majority of the ground dwelling, or terrestrial, fungi. This is also the season for mushroom hunters to head to the woods to collect for the dinner table or the dye pot. Because of their clandestine, ephemeral, and largely unpredictable nature, the species diversity, abundance and ecological roles of the ground dwelling fungi in North America remain little known, especially in the coastal temperate rainforest of Southeast Alaska. However, such knowledge is essential to understand and improve our knowledge of forest ecosystems and their management.

The Tongass Inventory and Monitoring program supported a pilot project to begin inventories of a group of terrestrial fungi, called mycorrhizal fungi. Mycorrhizal fungi grow in association with the roots of plants (the term "mycorrhiza" comes from Greek roots meaning fungus and root). They obtain energy from the host plant (in the form of carbon) and in return provide the plants with nutrients mined from the soil. Many of the mushrooms that emerge in the fall are the reproductive structures of the mycorrhizal fungi. Each soil type and plant contains its own suite of mycorrhizal fungi that contribute to the health and nutrient cycling within that ecosystem.

To assist in gathering information and answering questions about these specialized fungi, Dr. Steve Trudell, a

forest mycologist from the University of Washington, visited Mitkof Island to begin fungal inventories within several soil and forest succession types. Steve's visits were timed in order to document and collect the most number of species emerging at different times of the season. Over 200 collections of fungi were made.

One of the North America's leading authorities on truffle fungi, Dr. Mike Castellano, PNW Research Station, Portland, also came to Mitkof Island to look for truffles in the study areas. Truffle fungi keep their reproductive structures below ground, so they are harder to find than the mushrooms. The truffle fungi also form the mycorrhizal association that benefits the growth and survival of many plants. Mike was successful in finding several truffle species and even collected one he suspects is new to science!

At this time, the goals are to begin to document the terrestrial fungi known here and to understand the different roles they have. This will help determine the relative health and productivity of the soil and forest in various stages of succession. Some questions that are unanswered related to terrestrial fungi on the Tongass National Forest are, for example: What is the diversity of terrestrial fungi communities within different forest types? Do terrestrial fungal communities change in response to management activities? Are specific fungal species indicators of soil productivity? Are there rare species of terrestrial fungi associated with certain forest or soil types? To what extent do fungi provide food for wildlife on the Tongass? What are the edible fungi on the Tongass, and can they be harvested sustainably? Although providing complete answers to these and other fundamental questions is a tall order, we have made the first step and hope to continue with more comprehensive inventories and directed studies in the future.



Student employee Kelly Aho collects fungi for identification. Photo by Karen Dillman.

Dutch Oven Cooking

By Kim Kiml, Information Specialist, Cordova RD

ooking in Dutch ovens presents an opportunity to connect with nature in a unique way. With the great outdoors as a kitchen, there are endless opportunities and variations to explore.

Cooking outside has always had a bit of a mystique to both the process and events associated with this form of culinary expression. For some there are fond memories of roasting hot dogs over an open fire as children. For others who have taken several steps beyond that and ventured into "real" cooking outside and cooked and baked entire meals over a campfire—ah, now there is a real treat. There is nothing like it.

And according to my daughter, the flavor of stew in a Dutch oven cooked over a campfire is different, better than stews cooked indoors. I think she may be right. If cared for properly, Dutch ovens should never be washed with soap, only scraped, and rinsed (there are those who may disagree with me on this one), re-oiled and stored for future use. So there may be some truth to that theory, Dutch ovens can build up a patina of sorts—a seasoning all its own.

Although I have cooked in cast iron and Dutch ovens for many years, it has only been in the past 10 years that I have incorporated this form of outdoor cooking into my interpretation and education programs. I believe it has been a great addition to our programs both for the participants and me. It's a real hands-on activity: cutting and chopping vegetables, kneading bread dough and stirring the pot. For many young campers, it's their first time cooking real food. For me, it has created a unique opportunity to blend teaching and a connection to the past for folks attending the programs.

This past summer I also prepared a Dutch oven meal for the crew working on restoring the McKinley Trail Cabin. It only seemed appropriate and well suited to the time frame and age of the cabin built around 1917.

Cooking in Dutch ovens. although rewarding, can be a bit tricky sometimes. The basics are simple. The goal is to maintain an even medium to low heat. If you are using briquettes, the general rule of thumb is one briquette for each inch of diameter of the oven; for a 12-inch oven place 12 briquettes on top and 12 briquettes on bottom. There are a few exceptions to this. When baking bread I usually place 2 to 4 more coals on top. I also like to preheat my ovens; this seems to expedite the cooking time.

For anyone interested in Dutch oven cooking, there is a great cookbook called *Camp Cooking 100 years* by the National Museum of Forest Service History.



Kim Kiml uses Dutch ovens to make dinner for the McKinley Trail Cabin crew. Photo by Chris Dunlap.

Pioneer Night Meal

3 lbs of cubed game meat (such as moose)

1 large onion

one potato per person (10-12)

5 carrots, cut

2 cans of corn (14 oz.)

3 bay leaves

salt and pepper to taste

3 to 5 T of oil or lard

2 to 3 quarts of water

a little flour to thicken if needed

14" Dutch Oven

Clean all vegetables, cut into appropriate sizes, and set aside. Brown the meat, then add the vegetables along with the water, bay leaves, salt and pepper. Depending on the weather conditions this will take $1\frac{1}{2}$ to 2 hours to cook.

Note: I tried to keep the recipe simple since the gold miners coming to Alaska wouldn't have had many extras. I even used a chart from one of my "Alaska Gold Rush" programs listing the items each gold miner should have to complete their journey and survive for one year. All the ingredients listed in this recipe were on that list.

Peach Cobbler

2-3 cans of peaches (14-16 oz.)

1 cup flour 1 cup oatmeal 1 cup brown sugar ½ stick of butter

Put the peaches and some of the brown sugar in the bottom of the Dutch oven. Mix the remaining ingredients, cut the butter into small pieces, and work into the dough until the consistency is somewhat crumbly forming "pea" size balls. If you want a thicker crust, double this amount. Distribute evenly over peaches. Cook until bubbly and slightly browned on top. The baking time will vary, 40 minutes to 1 hour.

Healthy Working Forest, Healthy Working Communities

The Human Story of the Tongass Economic Recovery Projects

By Leslie Swada, Acting Public Affairs Specialist, Tongass National Forest



The Yakutat Tlingit Tribe crew escorts the mini excavator out of the project area using supportive panels to minimize the damage to wetlands. Photo by Dan Kelliher.

erving Southeast Alaskan communities since 1907, the Forest Service has continuously contributed to local economies across the region. During the Great Depression, the Civilian Conservation Corps was established to ease nationwide under-employment, and these programs were managed on the Tongass by the Forest Service. Using local wood products, workers built trails, cabins and shelters to provide greater accessibility to the Forest. Similarly, in recent years, our economy has down turned, and the Forest Service has continued the tradition of putting people to work, this time through the American Recovery and Reinvestment Act (ARRA).

Nearly 40 restoration, engineering or recreation projects were funded with \$23.6 million across the Tongass National Forest. These projects encompassed 71 contracts, the majority of which were awarded to Alaskan based companies. Our work provided the means to fund over 30 contractors this summer, and currently fund 35 jobs in Southeast Alaska. ARRA funds supported both tempo-

rary and permanent Forest Service employees for 4,484 days of project work his past fiscal year.

Through ARRA funding, healthy forest ecosystems have been restored on the Yakutat Ranger District through the Lost River Restoration and Trail Fish Passage Improvement project. The district received \$300,000 to restore 25 streams impacted by a previous oil exploration route, restoring fish stream connectivity and proper function to adjacent wetlands. Most of the money funded an agreement between the Forest Service and the Yakutat Tlingit Tribe, with assistance from Alaska Department of Fish and Game. Both the Forest Service and the ADF&G said that the project was more successful than anticipated.

Alex James, Project Manager for the Yakutat Tlingit Tribe, stated recently that, "Four Native people from the Tribe were employed [by ARRA funds] for over a month. The work consisted of bringing in the equipment and fuel, and prepping and establishing the route with minimum impact to the watershed."

James also said, "I appreciated the work to enhance

the lost river watershed and to meet the guidelines set by the Alaska Department of Fish and Game. The Tribe is pleased to do the work with the Forest Service."

Dry Straights Road Resurfacing near Petersburg was another ARRA project that brought about an impact to a small community. The Forest Service hired Ketchikan Ready Mix, a family-owned Southeast Alaska business, to implement the project. In doing so, the company employed between five and 15 people on a periodic basis, and during the winter season when a lot of people are unemployed. The culvert replacement employed up to six people.

Asked about the economic impact to the local community, Larry Dunham, Forest Engineer, said, "These are jobs and incomes the town of Petersburg sorely needed. Thousands of dollars were spent on transportation, rent, groceries, fuel and spare parts. There is no denying, this Forest Service stimulus project has had a very positive financial effect on Petersburg."

ARRA funds even found their way to the small community of Hyder. Off the beaten path, Hyder is home to the Titan Trail, one of the few Tongass trails accessible by a road system to and from the Lower 48. Contracts for Titan Trail were awarded to a local contractor living in Hyder, and provided employment for four people for five weeks total, according to Nicholas Korpela of Korpela Construction. The result? The newly constructed bridge provides new, safe passage across the

creek and is a striking timber-arched suspension bridge, the first of its kind on the Tongass.

Continuing the Tongass National Forest's long history of enhancing the economy, the stimulus funds have provided the means for employment and partnerships while improving access to recreate and subsist in our largest forest. Forrest Cole, Forest Supervisor, perhaps said it best. "The American Recovery and Reinvestment Act projects on the Tongass were a resounding success. Great job."

Korpela Construction employees work on the 90-ft. Titan Trail Bridge crossing Fish Creek in Hyder. Photo by Clark Simpson.



Repairing Beaver Lake Trail By Frank Barnes, Information Receptionist, Sitka Ranger District

he U.S. Forest Service, Sitka Trail Works and community members celebrated the reopening of the Beaver Lake Trail and Sawmill Creek Bridge on October 23 with hot chowder and a warm campfire. The trail, which is used by Sitka residents, visitors and guided hikers, has a moderate difficulty level. It provides a nice hike from the Sitka road system with the possibility of spectacular views of the New bridge on Beaver Lake Trail nearby mountains. It leads to



Beaver Lake, which is surrounded by old growth forest and bogs, and sits at an elevation of 440 feet on a lower bench of Bear Mountain.

The trailhead is accessed by crossing over Sawmill Creek on a new 116-foot bridge. Traffic is expected to increase significantly on this popular trail now that it is part of the 9-mile Sawmill Cove Loop. The loop connects the Sawmill Creek Campground, the Beaver Lake Trail, the new Herring Cove Trail, and the Thimbleberry/Heart Lake Trail.

The Sawmill Creek to Beaver Lake section of trail was steep and depended on wood staircases to negotiate the 270-foot elevation change. The old staircases were steep and had deteriorated to the point of being dangerous in several spots. The new, rerouted section eliminates the steep, staired sections, replacing them with a longer gravel trail that incorporates an easier grade. This gradually sloping gravel pathway, in combination with rock stepping stones, make the trail not only less strenuous but also safer

After reaching the top of this steep rise, the original 1980s trail wandered through forest and muskeg on its way to Beaver Lake. Large portions of this segment were built as an ACZA-treated boardwalk. The treated boardwalk has not proven to be very durable in the Southeast climate and has deteriorated short of its expected life. When iced, the boardwalk became extremely slippery, and when covered in snow it was im-

possible to tell where the boardwalk ended, making it very easy to step off the boards and into holes along the walk. Portions of this section have been re-routed and the boardwalk planks have been replaced with a meandering, park-like gravel path. This should make hiking a lot more pleasant and safer for winter hikers.

The Sawmill Creek Bridge is another vital part of the Sawmill Creek Loop. Before, the only access to the Beaver Lake Trail was by crossing the original log stringer bridge from the Sawmill Creek Campground. This wood bridge was constructed in 1989 using logs provided by the Alaska Pulp Corporation. The original log bridge was showing signs of deterioration, so this past summer, the original bridge was replaced with a new, single span steel structure. The steel bridge was constructed in two pieces for transport to the site and assembled before being put into place over the creek.

The Sawmill Creek Loop is now complete and ready for increased foot traffic.

Tongass Rainforest Festival Brings Community Together

Jennifer Kane, Partnership Coordinator and Karen Dillman, Ecologist, Tongass National Forest

n a sunny weekend in September, the community of Petersburg and travelers from different corners of Southeast Alaska came together to celebrate the natural world during the Tongass Rainforest Festival.



Valon Weathers paints a rockfish for his fish print T-shirt. Photo by Karen Dillman.

The event attracted participants of all ages, from children who were excited to go on nature walks and build fairy houses out of bark and moss to long-time Petersburg residents who wanted to learn more about mushrooms and invasive plants in their community. The event also drew out-of-town participants from Sitka, Juneau, Ketchikan, Haines, and even Seattle.

The Thursday night opening program featured a talk by Rick Edwards, aquatic ecologist, PNW Research Station, on the temperate rainforest carbon cycle and how climate change is predicted to disrupt this balance. The following day, Rick led a walk to a nearby muskeg to highlight the factors influencing the nutrient and carbon cycle. Later that day, an invasive species walk around Petersburg was led by Barb

Schrader, Regional Ecologist. Local residents were surprised to learn that invasive species grow in their neighbors' front yards and that some easily spread to other places. Participants were provided with recommendations on what and what not

to plant, as well as how to remove invasives and prevent their spread. Festival attendants also had a chance to learn about native plants on a walk guided by Judy Hall Jacobsen, the author of *Native Plants of Southeast Alaska*.

The Seattle-based and award winning photographer Amy Gulick presented an opening night slideshow with stunning

images and stories from her new book, *Salmon in the Trees*. Amy later taught a photography workshop in which students took nature photographs around Petersburg. She then facilitated a group critique of the students' work based upon the principles of nature photography.

Local artists kicked off the festival the week before with an artist's reception at the Clausen Memorial Museum. During the festival weekend, co-organizer Sunny Rice, Alaska Sea Grant Marine Advisory Program, who is a self-identified art fan and amateur naturalist, gave a naturalist's tour of the art show during the festival with her own unique spin on the artwork.

A popular event was the Kids' Nature Walk: Leafing through Diversity, led by Joni Johnson, biology teacher, Petersburg High School. Children

and their parents learned about the different types of leaves found in the rainforest. Many children were already very knowledgeable about the local plants—enough to warn the out-of-towners about devil's club! The kids collected leaves and made leaf prints with paper and ink. Kids had another chance for nature art with the fish print T-shirt activity guided by Eric Castro, fish biologist, Petersburg Ranger District. They also explored details of the rainforest during the scavenger hunt led by Karisa Garner and Caddie Bergren, Petersburg Ranger District.

For those with a curiosity about mushrooms, there were multiple opportunities to get out in the woods and hone one's mushroom identification skills. Emil Tucker, hydrologist, Tongass National Forest, and Joe Stratman, Alaska Department of Fish & Game, led the Mitkof Mushroom Foray. Later in the weekend, mycologist Steve Trudell from the University of Washington provided his expertise in identifying mushrooms using charts and dichotomous keys. To help identify one particular mushroom, Steve managed to convince the skeptical class to nibble on a mushroom that made everyone's tongue go numb.

Petersburg High School students impressed the audience with their science projects during the series of brown bag lunch talks. These projects went beyond the usual science fair studies as these students collected and bred salmon for a local hatchery and also studied the movement and retreat of the LeConte Glacier.

A community highlight was the Saturday night "Taste of the Rainforest" Potluck and Wild Berry Cook off at the ANB/ANS Hall. Attendees dined on locally harvested items such



as pickled fiddlehead ferns, wild mushroom cakes, huckleberry jam, and salmon with blueberry sauce cooked on a cedar plank, while a string band of local musicians played.

The Tongass Rainforest Festival is a successful collaborative effort of organizations such as the Alaska Department of Fish and Game, Alaska Sea Grant Marine Advisory Program, Petersburg Arts Council, Petersburg High School, Petersburg Indian Association, Petersburg Public Library, UAF Cooperative Extension Service, and the U.S. Forest Service, as well as many enthusiastic individuals and local businesses.

Petersburg High School teacher Joni Johnson uses art to teach about leaf diversity. Photo by Karen Dillman.

Hazard Tree Risk Assessment Training

From Forest Health Protection

By Lori Winton, PhD & Mark Schultz, PhD, Forest Health Protection, R10 State & Private Forestry

dentifying and assessing hazards is some-Lthing we all normally do to varying degrees, usually without deliberate effort. In the workplace and public recreation areas, safety programs formalize this awareness while emphasizing accountability and documentation. Employees and visitors who work and play in the woods assume some level of risk, however many are oblivious to the possibility of hazard trees. Managers of designated recreation

areas are responsible for ensuring visitor safety from reasonably fore-seeable hazards, including those created by unstable trees. A hazard tree program consists of regular inspections by trained personnel, as well as adequate documentation to prioritize risk and schedule corrective treatments. The level of training provided to those inspecting trees and the use of standardized inspection forms are critical components of an effective hazard tree program.

Likewise, employees and supervisors should recognize that ev-



FHP Biological Science Technician Steve Swenson taps sensors on the Arbosonic.

ery year hazard trees in our forests contribute to near misses, injury, or death for both fire and other personnel. Situational awareness, augmented by information about key indicators of potential tree failure help employees assess tree hazards.

Part of the Forest Health Protection duties is to provide hazard tree training to Forest Service personnel. We are currently revamping our Hazard Tree training and are interested in your input on how to make it most effective. Our current plans are to provide hazard tree training

this spring in order to facilitate pre-season risk assessment surveys. The training program will demonstrate and utilize the acoustic tomograph (ArborSonic), a non-destructive tool that allows us to graphically visualize the amount of internal decay. Last summer we tested the device on a variety of Alaskan tree species. We found it to be highly accurate and particularly attractive for providing objective means of assessing high value trees.

Meanwhile, you can learn more about hazard trees and FHP by downloading copies of our hazard tree book and leaflet from http://www.fs.fed.us/r10/spf/fhp/.

Also, for those who want to know more about the organisms involved in creating hazard trees, refer to "Insects & Diseases of Alaska."

For comments or more information please contact Lori Winton, Forest Pathologist, R10 FHP Hazard Tree Program Coordinator at:

<u>lmwinton@fs.fed.us</u> or (907) 743-9460.

Letter to Chief Tom Tidwell

By Bill Hucks, Volunteer, Seattle, Washington (reprinted by permission)

ear Chief Tidwell, I participated as a volunteer in the Tongass National Forest Passport In Time (PIT) Archaeological Survey and Monitoring Expedition to Boca De Quadra, by sea kayak earlier this summer. I want to share some impressions of this experience for your consideration as you work to meet the challenges of stewarding the treasure that is our National Forests and Grasslands.



Jacob Hoffman inspected unidentified structure in Misty Fiords National Monument. Photo by Dave Richards.

The PIT Expedition that I experienced involved 12 days of paddling sea kayaks along the remote shorelines of SE Alaska in the Misty Fiords National Monument.

We paddled 140 miles, monitoring known and surveying for unknown culturally significant sites. There were three Forest Service staff, and five volunteers, myself included. These particular shores had not been surveyed since 1993 and we were successful both in monitoring all known sites and discovering exciting new treasures. Forest Service staff were Archaeologist Martin Stanford, Tribal Relations Specialist John Autrey, and Recreation Ranger Jacob Hofman.

This expedition was lead by Archaeologist Martin Stanford. Martin was a remarkable leader in several ways. First, the level of detail in his careful expedition planning was vast. Months in advance of departure date, expedition members received an itinerary describing in detail each day's planned route, distances to travel, sites we would monitor and suspected sites we would survey to find, historical background of rel-

evance, and descriptions of camping opportunities or challenges. Having done a fair amount of nautical navigation myself, a quick check of tide and current information confirmed Martin had planned the travel of this 140 mile paddling expedition to take best advantage of these factors, maximizing our ability to accomplish expedition goals. This itinerary also included safety guidelines, a PIT rule book, historical information and bibliography, and descriptions of what volunteers could expect from the experience. He prepared us well, and it was evidenced in how effectively the group worked in the field.

Second, Martin's vigilance for our safety was paramount in everything we did, from the training and practice of bear safety, to his constant radio updates while on the water. We were beached one day due to weather, in conditions that less prudent leaders might have gambled upon. Martin was always the first up and usually the last to bed, keeping everyone's welfare foremost in his mind.

Finally, Martin was a remarkable

resource of information, not just about the history and pre-history with which we were working, but with the natural history and geology of our setting.

From Martin's bibliography I elected to purchase George Thornton Emmons, "The Tlingit Indians." This 488-page volume is considered by some to be the "bible" of Tlingit culture. Reading this material in advance enriched my experience as a volunteer on this expedi-

tion. Having both Martin Stanford and John Autry to discuss this cultural background was a fantastic opportunity to place oneself in the time and setting of the area's pre-history. When we found fish traps and canoe runs, culturally modified trees and signs of pre-historic settlement, it was a treasure to experience. Finding a shaman burial site was both an honor and an experience that defies description. It was both spiritually moving and emotionally stunning. I was simply blown away.

When I reflect on my great fortune to be able to participate in this PIT expedition, it seems remarkable that such a program exists in the Forest Service. For citizen participants to engage with a program like this reflects well on your agency, and I have told many about this amazing program. These are connections that bring the U.S. Forest Service closer to the community.

It is important to remember too, that over time the National Forests are shifting the mission that they serve. Our nation's Gross National Product has shifted over time from



Dave Richards keeps an eye on an orca. Photo by Martin Sanford.

primarily goods and few services to today, where our GNP is comprised primarily of services and less of goods. The shift in the Forest Service to manage timber, mineral and natural resources is moving towards a greater emphasis on recreation. A big part of travel and leisure is the attraction of historical places and preserving our cultural heritage is vital to this pursuit.

In this regard, PIT program is essential and vital to the mission of the US Forest Service. I was honored

and privileged to participate in this program, and I hope you will continue to support Passport In Time and other citizen volunteer programs like it.

Sincerely, Bill Hucks, RN CNOR

Multi-Agency Efforts By Marie Messing, Transportation Engineer

The Alaska Region Forest Service has been working with other Alaska Federal Land Management Agencies (AKFLMAs) to develop an Alaska Federal Lands Long Range Transportation Plan (LRTP). The Federal Highway Administration is leading the multiagency planning effort. Other Alaska federal agencies involved in the process are U.S. Fish & Wildlife Service, National Park Service, Bureau of Land Management and Bureau of Indian Affairs. The Alaska Department of Transportation & Public Facilities is a participating partner in the development of the plan.

The AKFLMAs share regional administrative boundaries and hope that coordinated planning will reduce duplicative efforts. On September 1, 2010, the group met at the Kenai National Wildlife Refuge and among other topics discussed the transportation challenges of the refuge in the Russian River Area. Andy Loranger, Refuge Manager and other refuge staff, provided the group with a tour of the Skilak Lake Road, Russian River Ferry and the unique animal crossing issues of the Sterling Highway. Robert Stovall from the Seward Ranger District participated and is the Chugach National Forest Sterling Highway contact.

The mission of the AKFLMA LRTP is "to implement a regional long-range transportation plan that fulfills Alaska's Federal land management agency's common strategies for transportation that remains compatible with indi-



Robert Stovall, Deputy District Ranger, Chugach National Forest, talks with Andy Loranger, Refuge Manager, Kenai National Wildlife Refuge. Photo by Tom Erkert.

vidual land management agency missions in partnership with the Alaska Department of Transportation and Public Facilities."

A draft of the individual Forest Service section of the LRTP should be ready for review by December 2010 and the complete plan with all AKFLMAs available in the summer of 2011. If you would like a copy or have any questions about the LRTP process, please contact Marie Messing, Alaska Region Transportation Engineer at (907) 586-8834.

Caribou on Ice: Cross-Cultural Climate Change Expedition

By Mary Ann Benoit, Sherry Nelson, & Jeremy Karchut. Photos by J. Karchut, Chugach National Forest



Kenaitze youth Raven Williams and DNR archaeologist Richard VanderHoek throwing atl-atls, replicas of ancient hunting weapons.

Increased warming across the Arctic and Subarctic has caused ice patches and glaciers in Alaska and Canada to melt at an alarming rate. The result is that fragile cultural materials left by these past hunters, preserved for hundreds or thousands of years in ice, are being exposed to the elements. Prehistoric hunters used ice patches and glaciers across the Arctic as locations for ambushing caribou, as they were predictable and reliable locations to find caribou seeking respite from summer heat and insects.

The artifacts and other materials that have been recovered from melting ice patches and glaciers are unique resources that give us an unprecedented look at how people hunted and lived in the past. Sadly, these artifacts and their potential for elucidating an important part of the prehistoric past will be lost unless immediate action is taken.

In August 2010, the U.S. Forest

Service, the Alaska State Office of History and Archaeology, the Kenaitze Indian Tribe (Dena'ina Athabascan), and Alaska Geographic collaborated on an ice patch archaeology project on the Kenai Peninsula, Alaska. An interdisciplinary group including archaeologists, wildlife biologists, and educators led a small group of Native American students on a pilot ice patch archaeology study—the first of its kind in a national forest in Alaska. This is the first time archaeologists have examined this region for potential prehistoric hunting/resource procurement areas that focus on high elevation environments in the Kenai Mountains. Climate change is affecting the Chugach National Forest in obvious ways, including receding glaciers, bark beetle infestation, and increased erosion. Though inclement weather and a low melt-year prohibited the group from surveying the most high-potential snow and ice patches in the area, the project was a successful collaboration between state and federal land-managing agencies and an Alaska Native tribe. The Kenaitze students learned about archaeological survey techniques in an area where their ancestors hunted caribou, mountain goat, moose, and Dall sheep for over a thousand years, and archaeologists established baseline data for numerous ice patch locations.

Six ice patch locations were surveyed and GPS mapped. No cultural material was found during this initial survey. High snow accumulations the previous winter combined with a low melt-year resulted in too much recent snow during the survey. The participants successfully documented game trails, caribou dung, and numerous caribou antlers on and near the perimeter of the snow fields. Caribou were observed on several ice patches, verifying that they use this area in the late summer. The participants learned how to conduct alpine archaeological surveys, GPS techniques, and how to recognize organic materials on and near ice patch locations. This is a highprobability area for ice patch archaeology, and Forest Service archaeologists will continue to monitor this area during high melt years.



Caribou antler exposed nest to a melting ice patch.

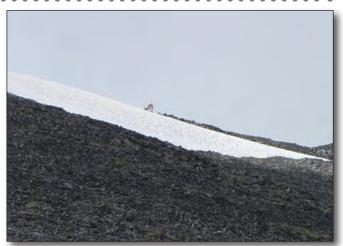
In addition to providing a sense of accomplishment for the youth, the Forest Service staff provided training and mentorship to highlight the pathways into the Forest Service's diverse workforce through hands-on experiences.

This program was integrated with the Chugach National Forest's "Children's Forest" concept and provided a conduit to engage diverse youth across the region through

the development of cross-cultural climate-change expedition. Alaska Geographic coordinated with the Alaska Teen Media Institute to provide media equipment and training for the youth. Their findings were showcased on the "Children's Forest" web outlet, providing an opportunity to reach other audiences and showcase the research and cultural awareness of the Kenai Peninsula.

Project Highlights

- Four-day horse packing expedition to a remote and beautiful camp area for the ice patch expedition. Youth were able to see a diversity of plant and animal life, and we did find what appeared to be an old Russian prospecting site.
- Ice Patch Expedition field trip to Exit Glacier with the Park Service interpreter to learn about climate change.
- Youth learned how we identified our survey area by using GIS to model a variety of scientific data.
- Youth described the project and accomplishments to the Forest and Regional Leadership team in the field.
- The youth attended educational trainings on job applications, resume writing, conducting archaeological surveys, GIS modeling, climate change, and developing media products.



Barren ground caribou on ice patch identified for survey.

- An article was written in the Redoubt Reporter about the expedition, which is available at http://redoubtreport-er.wordpress.com/2010/08/18/cool-hunt-%E2%80%94-archaeologists-native-youth-look-for-ancient-artifacts-among-receding-snow/.
- A video highlighting the project is available at http://www.youtube.com/user/ChugachChildForest#p/u/0/
 PNI1euHU58U
- A poster was presented at the "Frozen Pasts" 2nd International Glacial Archaeology Symposium in Trondheim, Norway in early October entitled "*Preserving Native Culture through Ice Patch Archaeology: An Example from the Kenai Mountains, Alaska.*" Norway is the "homeland" of ice patch archaeology, where reindeer hunting on ice patches occurred for thousands of years and associated artifacts have been discovered since the 1930s.

For more information contact:

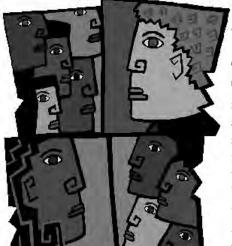
Mary Ann Benoit, <u>mbenoit@fs.fed.us</u>, 907-224-4122 Sherry Nelson, <u>snelson@fs.fed.us</u>, 907-224-4114

Farewell, Dear Friend

John Caouette, a valued friend and colleague, died in an accident October 12, 2010. John worked with folks from all levels of the Forest Service in Alaska, conducting field work on the Alternatives to Clearcut Study, serving as statistician on the Tongass Land Management Plan Revision, and pioneering the size-density method of evaluating forest structure, working with most Tongass ranger districts field validating his model.

Most recently, John worked with The Nature Conservancy in a cooperative project with the Forest Service analyzing inventory plot data to establish how climate shaped the distribution of coastal tree species, John is survived by his wife Rebecca and two young children. John was a man with good spirit who is missed by all who knew him.

Paul Hennon and Barbara Schrader



Creating a Diverse Workforce When the Chips (and Budgets) Are Down

By Cindi Lagoudakis, Chair-elect, Tongass Civil Rights Advisory Group

The role of civil rights programs is to promote diversity, foster a productive work environment and to ensure all employees are valued for their unique contributions. This November, three Alaska employees—Teddy Castillo, Ross Evans, and I-were invited to participate in the Northern Region Civil Rights meeting on workforce diversity strategy. We joined representatives from a number of Region 1 forests and grasslands. What could have been just another dull meeting became a spirited discussion of ideas for increasing workforce diversity.

While the Tongass has appointed a small team to address the diversity challenge, Region 1 chose instead to bring together varied employees from all their forests, ranging from technicians to forest supervisors. They divided into smaller groups to share thoughts about the present and future state of the Forest Service workforce. The discussions that followed were a candid assessment of where we are as an agency, and what we might be able to do better.

Everyone unanimously acknowledged that current morale makes attracting new and diverse employees

significantly harder. Not everyone agreed on the causes for morale issues, however. One ranger felt that new employees were less inclined to see our cumulative administrative burdens as a downside to Forest Service employment. Others disagreed. A forest supervisor thought we needed to train employees to accept that we are in a constant state of transition, learning to adapt to new technologies. Other district employees felt that supervisors are lacking in skills and time to train and mentor their staff. In general, however, there were some themes that resonated with everyone.

For example, many felt that the Forest Service needs to do more to hold people accountable for work performance and behaviors at all levels of the organization, especially those in leadership roles. At the same time, participants saw the need for celebrating successes and accomplishments as critical to morale. Communication, a time-honored theme, was also touched upon. The group recommended that supervisors should to be open to explaining to why diversity hiring choices are made to applicants and staff, while noting that employees may not be aware there are mandates for workforce diversity that have the force of law behind them. Also making the top of the list for improving effectiveness and morale was a willingness to make hard calls about work that will and will not get done, and stepping back from the everythingis-a-priority way of thinking.

Concern for impacts to budgets

generated a great deal of discussion about reducing workforce by attrition vs. loss of corporate knowledge and organizational effectiveness. Both were seen as barriers to hiring and keeping new and inexperienced employees, especially diversity hires who might be from another locale and perhaps unfamiliar with the Forest Service and their new town.

Retention was another concern. We discussed "broken" career ladders, creating career paths, and having enough staff to mentor new employees.

Some solutions were suggested, such as talking with high schools and colleges about the types of jobs students are seeking, and what students are looking for in an employer. A number of units took the initiative to advertise jobs in local newspapers. Other tips included meeting with tribal groups, clubs and organizations that could tap into their constituents and help share employment information.

Several people mentioned that we have been having this same discussion for decades. In 1978, I was the first woman ever hired to work in the timber shop on my ranger district. In fact, there were only two other women on staff who did not hold administrative positions. In contrast, at this 2010 meeting, I saw a lot more variety in the faces around the room. There was an energized and enthusiastic group of men and women of various backgrounds and abilities, with many good ideas for creating and keeping a more diverse workforce.

Voices in the Wilderness: Artist Residency

By Barbara Lydon, Wilderness Ranger, Tongass National Forest

ummer 2010 marked the first year of our Voices of the Wilderness artist residency on the Tongass National Forest. We modeled it after: residencies in national parks; the Flathead National Forest's Artist-Wilderness-Connect program in the Bob Marshall Wilderness; the arts programs at the 2010 World Wilderness Congress in Merida, Mexico; and, a volunteer opportunity in Gates of the Arctic National Park. However, our program was different in one respect. Instead of staying at a remote wilderness cabin, our artists were paired with rangers, and then actively engaged in stewardship projects. Traveling by sea kayak and camping alongside the fiord, they participated in research, monitoring, and education projects in Tracy Arm-Ford's Terror. Not only were they inspired by the natural beauty they saw, but they learned about stewardship of America's public lands.

For the first year, we had twelve applicants ranging from painters, photographers, a photographer/composer, an animator, an adventure videographer, writers and a theatre director. We ultimately chose three artists: Aleria Jensen, a writer from Juneau; Brenda Schwartz, a watercolor painter from Wrangell; and Leon Ingulsrud, a playwright from New York City. The artists were chosen based on artistic merit, their statement of purpose and appropriateness to a national forest residency, as well as on their community project proposal.

Each artist submitted applications with project and community extension proposals that really spoke to the mission of our residency: to contribute to the



Brenda Schwartz works on a watercolor painting of Dawes Glacier in Endicott Arm

preservation and interpretation of our public lands, and to raise awareness through conservation education and the arts. We looked forward to seeing the finished products resulting from their experiences in Tracy Arm-Ford's Terror.

We are preparing for our 2011 artist residency, which we are hoping to expand to Admiralty National Monument and Misty Fiords. Since next year is the International Year of Forests, we are hoping the celebration will encourage artists from

around the nation to apply for our artist residency, or just visit a forest for inspiration. Our long term goal is to host an art show in 2014 to celebrate the 50th anniversary of the Wilderness Act. The show will include at least one piece donated by each participating artist. The Tongass is one of the nation's premier forests, and the work of both local and national artists will further highlight this unique area through artistic interpretation and expressive community extensions.

Community Events

- December 2010 Brenda Schwartz's month-long show at Annie Kaill's in downtown Juneau. Her paintings were done exclusively from her time in Tracy Arm-Ford's Terror.
- January 14, 2011 Leon Ingulsrud will be directing his play, The Blue Bear, an adaptation of Lynn Schooler's book, which opens at the Perseverance Theatre in Juneau. He will present a slideshow at The Canvas prior to the opening to reflect on how his experiences in Holkham Bay and Endicott Arm, the area which influenced both the book and the play.
- March 25, 2011 Aleria Jensen's presentation at the Fireside Chat, Mendenhall Visitor Center. Her essay, focusing exclusively on the Voices of the Wilderness program, is posted on the 49 Writers blog at www.49writers.blogspot.com.

SCA Outdoor Recreation Interns Get Involved

Journey to Alaska by Megan Barnhart, Outdoor Recreation Intern, Regional Office

Tearned my Bachelor of Science degree from Western Michigan .University in April 2009 with a double major in Earth Sciences and Environmental Studies and coursework in Secondary Education. In a time with economic and environmental struggle, I decided that serving a term with AmeriCorps would be a great opportunity to transition from my studies into rewarding work. I began applying to AmeriCorps positions during my last semester of college and accepted a seasonal position at Sequoia and Kings Canyon National Park. This opportunity to live among the world's largest trees as a Camping Adventures with My Parents program coordinator came through the Student Conservation Association.

I developed a variety of professional skills through my position as a CAMP program coordinator where I administered an educational program at Sequoia and Kings Canyon National Park. I recruited participants through community outreach, created a budget approved by human resources, planned all activities,

organized volunteers to assist with the program, and educated participants on *Leave No Trace* principals. Through the internship, I had the opportunity to experience several roles within the park.

After living and working at Sequoia National Park, I headed to Portland where I worked as a program specialist for Conservation Services group and The Energy Trust of Oregon. The non-profit program provided funding for residents making energy saving updates to their homes. After spending six months doing administrative work. I realized that my heart was in the field of natural resources. I put in a two-week's notice and started a 14-week long Leadership Development Program with AmeriCorps through Northwest Youth Corps. I managed teens completing conservation stewardship projects and supervised camp life in the backcountry setting. The program educated youth on their surroundings and provided them with an appreciation for the natural world.

I am now enrolled in my third AmeriCorps program working at the

Alaska Regional Office in Juneau through the Student Conservation Association. The experience I have gained from my first internship with the SCA was immeasurable and led me to seek other opportunities with organization. Alaska is somewhere I have always dreamed of visiting. When I noticed a position in Alaska being advertised on SCA's website for an Outdoor Recreation Program Intern I looked more into the position and decided to apply. After interviewing and reading more about Juneau, I accepted the internship with enthusiasm.

I am thrilled to be working towards cultivating recreational interest through environmentally sound methods in such a beautiful area. I feel this position will help me transition into graduate school, where I am applying to study resource conservation through a Peace Corps Master's International program. Thus far the internship has been very gratifying. I have broadened my understanding of the Forest Service as an agency and am getting a once in a lifetime opportunity to explore Alaska.

Playing in the Muck by Travis Mason-Bushmam, Outdoor Recreation Intern, RO

It might have been a rainy, muddy and chilly day in Juneau, but the inclement weather couldn't deter a group of determined volunteers from pitching in to celebrate National Public Lands Day on the Tongass National Forest.

Nearly 50 people gathered on the Juneau Ranger District's Mendenhall Glacier Recreation Area on Sept. 25, to lend a hand in trail maintenance and restoration efforts. Whether debarking trees, hauling logs or laying moss, they were making one of Southeast Alaska's most popular outdoor recreation sites a better place for people and the environment.

Thanks to American Recovery and Reinvestment Act funds, a major trail improvement program has been underway at Mendenhall Glacier. The heavily-used Trail of Time is being widened, regraded and extended, to improve accessibility and expand interpretive opportunities. While most of the work has been performed by contractors, NPLD

volunteers made significant contributions.

For those who didn't mind playing in the muck, there was a Forest Service truck full of moss waiting on Glacier Spur Road. Volunteers hauled the ground cover back to the trail on wheelbarrows, where others were carefully placing the strips to revegetate the construction area. More than 800 linear feet of trail was restored, including an 8-foothigh rock causeway built to make the Trail of Time easier to navigate.



Outdoor Recreation Interns Travis Mason-Bushman and Megan Barnhart. Photo by Teresa Haugh.

No less important were those who picked up debarking tools and hacked away at logs slated to be used for bridges, water bars and other trail improvements. Other volunteers moved and spread gravel on the trail pathwaywhile some helped fuel the physical labor by serving up coffee and refreshments.

"We really appreciate the hard work and energy of all our volunteers," Juneau District Ranger Marti Marshall said. "Stewardship of national forests is a shared ethic, and National Public Lands Day shows just how many people understand and value the forest as a resource for Alaska and the nation."

Taking the lead in organizing the Juneau event was the Southeast Alaska Guidance Association, a longtime Forest Service partner that celebrates its 25th anniversary this year. Many of the volunteers were associated with SAGA, either past or present members of conservation crews. Executive Director Joe Parrish said their commitment showed how such programs built lasting awareness and appreciation for natural resources.

To wrap up the day, volunteers gathered in the Mendenhall Glacier Visitor Center auditorium, as five SAGA volunteers presented a slide show of their summer doing trail work in the Admiralty Island National Monument. Joe Welsh, Chavala Condor, Liz McLaurin, Sara DeLeo and Paul Kastler also discussed the special challenges that come with building trails in a wilderness area. The only power tools allowed, they said, were human-powered tools-hand drills, crosscut saws and log tongs.

Since 1994, National Public Lands Day has brought together hundreds of thousands of volunteers at sites across the country, joining together to make a "sweat equity" investment in their public lands. The National Environmental Education Foundation, which organizes the event, estimated that 170,000 people participated this year at more than 2,000 separate locations. Their efforts contributed to improvements valued at \$15 million nationwide.

Fallen Firefighter Memorial Rededication By Ron Knowles, Fire & Fuels Group Leader

he Alaska Fallen Firefighter Memorial has been temporarily located adjacent to the Anchorage Fire Department station on Airport Heights in Anchorage, AK. On September 11, 2010 a parade of formally dressed firefighters, fire trucks, bag pipers and the Anchorage Fire Department Honor Guard marched eight blocks to the permanent site of the memorial at 100 East Fourth Avenue. S&PF employee Gwen Marcus and I represented the U.S. Forest Service State and Private Forestry in the parade and ceremonies.

After remarks from Governor Sean Parnell and Fire Chiefs from various agencies, the solemn final bell was rung for 18 Alaska firefighters. Fifth on the list and the only Forest Service firefighter killed in the line of duty, was Chugach National Forest employee Mark Westover. Mark was 18 years old and working on the Russian River Fire when he was killed on June 29, 1969 in a helicopter accident.



Gwen Marcus and Ron Knowles at the Fallen Firefighter Memorial

Cordova Youths Seek Out a Challenge

By Bobby Scribner, Trail Crew Boss, Cordova Ranger District

ounded in 1980, **♦** Challenge Alaska began as a modest operation based out of Alyeska Ski Resort in Girdwood, Alaska, With support from a number of individuals, including Douglas Keil, an amputee and U.S. Disabled Alpine Ski Team gold-medalist, sought to afford Alaska's disabled community with resources and opportunities to pursue and engage in sports and

recreational endeavors that were otherwise made unavailable to those with impairments.

With 30 years under its belt, the organization has relocated to Anchorage, where it continues to carry out its original mission of providing people impaired by developmental and physical disabilities with a forum by which they can actively participate in a number of sports and recreational programs. More than 1,000 people with disabilities come to Challenge Alaska on an annual basis to take part in the many programs and events sponsored by the organization.

Though Challenge Alaska operates out of the western region of the Prince William Sound, this past summer the organization skipped clear across the inlet and joined forces with the Cordova Ranger District for the first time. On June 10, 2010, Rose Johnson, Keila Gonzalez, Nancy Bishop, and Mathew Figelski, local youths with varying disabilities from Cordova, took part in a five-day camping and kayak trip



Rose Johnson and Keila Gonzalez inspect a tide pool inhabitant.

that took them out on the sound to a place known as Sheep Bay. Supervising and guiding the kids over the course of the trip were Forest Service employees from the Cordova District, Challenge Alaska staff and volunteers, and a kayak ranger from the Glacier District.

The trip began at the Cordova Harbor. Anxious parents looked on as personnel loaded their children and gear into the Forest Service's work skiff and a 29-foot sea going vessel, the *Orca Chief*. From the start, the kids giggled and smiled as we all anticipated our departure to Sheep Bay. After all was loaded and stowed, parents and participants alike gave their final waves as we pulled away from the dock and headed toward our destination.

Upon arrival at our site, we unloaded personnel and gear onto the beach and addressed safety issues and concerns for the days to come. With an emphasis on *Leave No Trace* (a practice of low impact on the land) we moved on to camp setup and got everyone and everything

situated for the next five days.

The first evening was a similar pattern to the evenings that followed, which entailed a delicious meal and collecting firewood. We spent our final hours of each day sitting around the campfire, carrying on and telling stories with the occasional roasting of s'mores over the fire, as well as enjoying the tremendous views of the sunset and surrounding area. Eagles soared, seagulls clattered, and the tide rose

and fell at will.

On the first morning a brown bear was spotted by Mathew Figelski (our early riser) and Kevin Held (trail crew member, Cordova Ranger District) who both calmly exclaimed "Bear, Bear." In fact, the two were so calm I found it hard to take their voices seriously as I rustled out of my warm sleeping bag and got to my feet. By the time I managed to show my face, Dave Zastrow (Trails Coordinator, Cordova Ranger District) and Gretchen Lampe (Law enforcement, Cordova Ranger District) had firearms and bear spray at the ready. By that time, Mr. Brownie was long gone. After further discussion, it was apparent that the bear had been sniffing around some of the tents before sauntering away from all the commotion. Luckily we talked about bear safety and implemented a plan well in advance of our visitor.

The next few days were filled with various activities such as beach croquet, Frisbee, tide pool exploration, beachcombing, and the main focus of the trip, sea kayaking. On one occasion, Zastrow captured several tide pool creatures. Those who were brave enough handled and examined the critters. Needless to say, tide-pooling was a huge hit with the kids. At one point, Kim Kiml (Interpretation and Education, Cordova Ranger District) boated out to visit camp. During her stay, Kim led the kids in various activities, cultivating a greater sense of place through discussion, games, and exploration around the area.

Before we knew it, our five days of adventure had come to an end. On our last night together Lea Stiebing (Therapeutic Recreational Coordinator, Challenge Alaska) sat everyone around the campfire where we all described our favorite parts of the trip and what we had learned. Leah then went around to each individual and presented us with an item she found along the beach or in the forest that represented each of us in some way. I was impressed with Leah's natural ability in regard to ev-



Back row, left to right: Brian McGorry, Eric Stiebing, Annie Coleman, Kevin Held, Bobby Scribner, Mathew Figelski, Dave Zastrow, Rose Johnson, Gretchen Lampe. Front row: Keila Gonzalez, Nancy Bishop, Leah Stiebing,

eryone's character. I truly believe I can speak for everyone when I say that in that moment we all felt very close to each other. It was an emo-

tional moment in which I had never expected, one which I will always reflect upon when recalling our time together out at Sheep Bay.

Feeling Unmotivated? Review this checklist to restoke your fire

ven cheerleaders lose their enthusiasm from time to time. If you're feeling sluggish and unmotivatded, reviewing this checklist may help you reignite your spark:

- Purpose. Why are you here? Sometimes people get so caught up in daily responsibilities that they lose sight of the Big Picture. Remind yourself why you chose this field, this organization, this role.
- **Expectations.** Are your goals realistic or do you expect too much of yourself? It's hard to muster a lot of enthusiasm when you're so overwhelmed that you barely have time to breathe. Reconsider your priorities and look for ways to cut your workload.
- Connection. Do you see a gap between what you do every day and where you want to be in your career? Try connecting the dots. You'll be more committed to your tasks if you can view them as steps in the right direction.

- Assistance. Are you in over your head? Don't be afraid to ask for help from mentors, bosses, colleagues, and employees. If you stubbornly insist on taking responsibility for more than you can handle, you'll wind up burning out.
- **Distractions.** Are you struggling with personal issues? Simmering personal problems can drain attention and energy from your work life. Consider taking time off or seeking professional help to resolve your issues.
- Scheduling. Do you allow yourself enough time to focus on each of your duties? Poor scheduling can leave you frazzled and frantic. Rework your schedule to ensure you set realistic deadlines.
- Negativity. Are you your worst enemy? If you spend a lot of time beating up on yourself, you're undermining your own motivation and progress. Stop obsessing about perfection and start recognizing—and rewarding—your own accomplishments.

-Adapted from "10 tips for motivation," on the George Washington University Counseling Center Web site

Copper River Interagency Invasive Plant Survey By Kate Mohatt, Ecologist, Prince William Sound Zone

This summer, the Forest Service partnered with the National Park Service to survey the Copper River for invasive plants. This project was spawned in 2008, when the Chugach National Forest systematically surveyed for invasive plant species along the banks of several regularly traveled waterways including the Kenai River and Lake, Placer River, Portage River, 20-Mile River and Quartz Creek. Many invasive plant species found on the Chugach have the ability to spread readily along waterways, including white sweet clover, which is found along the Seward highway at multiple locations, and reed canary grass, which is spreading throughout several watersheds on the Kenai Peninsula and is especially prevalent on the Anchor River. These species are known to degrade ecosystem health by diminishing diversity of native flora, decreasing preferable forage for wildlife, constricting water flow, and increasing siltation thus adversely impacting spawning salmon.

While these surveys included most traveled waterways on the Chugach, one major waterway was left out. The mighty Copper River flows from interior Alaska starting near Slana passing several towns including Gakona, Glennallen, Copper Center, Kenney Lake and Chitina as it winds through the western border of Wrangell-St. Elias National Park before entering the Chugach National Forest. A majority of the land ownerships along these banks are non-Forest, and includes National Park land, several different tribal tracts, and private sections. Before the river makes its way to the ocean, it fans out into the sizable Copper River Delta, a major

stopping point for migratory birds and a key salmon fishery on the Chugach. The Richardson Highway crosses several tributaries to the Copper River, and a bridge crosses over the Copper River at Chitina. There are hundreds of known white sweet clover infestations along this highway, and spots where the highway crosses these tributaries and at the Chitina Bridge are prime locations for the introduction of this species into the Copper River.

The only method for surveying this logistically challenging stretch of river at the time was to launch rafts at Chitina and float through Park Service Lands before entering the Chugach. As a majority of land directly upstream of the Chugach is managed by the National Park Service, it made sense to join efforts in surveying the Copper River for invasive plants, as this had never been undertaken by either agency. Bonnie Million, the NPS Alaska Exotic Plant Management Team Liaison and Miranda Terwilliger, Ecologist for the Wrangell-St. Elias National Park joined Erin Cooper, USFS Wildlife Biologist and I for the five day trip. In addition, Jim Hannah, a retired Pilot Ranger for the Park was our chief rower along with Park Service volunteer Cameron Miller rowing the second raft.

Over the 70 mile stretch of river, we surveyed plots every 5 kilometers on federal lands and we also surveyed several campsites and seven Forest Service public access easements before Miles Lake. The only questionably exotic species found on Park Service lands in the systematically selected plots was a few populations of fox tail barley (Hordeum jubalatum), which is considered a native species in the state



Bonnie Million of the National Park Service records a GPS point at a plot. Photo by Miranda Terwilliger.

of Alaska, but is widely seeded along roadways and other disturbed habitats and many believe that its range is being artificially expanded. On Forest Service lands, populations of the common dandelion (Taraxacum officinale) were found at every easement site and at several campsites, possibly being spread by equipment used to brush trails. The common dandelion is not considered a high ranking invasive but it has been known to spread into undisturbed habitats and may reduce native floral diversity where it has become established. We pulled all plants that we found, with the exception of one site

where the population was considerably more extensive and will require several revisits in the future.

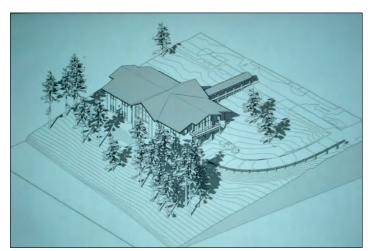
In summary, the good news is that we didn't find much for invasive plant species on the Copper River, and the ones we did find have a low potential for adverse ecological consequences. However, because there are known highly invasive species upstream at nearly every road crossing, periodic monitoring of this waterway will be crucial (and more cost effective than control of established infestations) to preventing spread of invasive plants into the Copper River Delta. Additionally, partnering with our bordering federal land managers provided a unique opportunity for discussions of future collaborations.

Erin Cooper, Cameron Miller and Kate Mohatt rafting on the Copper River. Photo by Bonnie Million.



New Research Facility in Juneau

By Teresa Haugh, Editor



Architect's rendering of new Forestry Sciences Laboratory

Laboratory, part of Pacific Northwest Research Station, is getting a new home after 18 years in its current location. On October 22, Asst. Station Director Paul Brewster invited Forest Service employees and members of the community to a presentation by Paul Voelckers of MRV Architects. Attendees inspected the architectural drawings, heard about high energy efficiency and the pros and cons of initial investments versus life cycle costs, and the use of local wood products in construction.

The new building will be located

on seven acres ad-

jacent to the University of Alaska Southeast, 60 feet back from Auke Lake. The scenic beauty of the lake and the surrounding forest will be visible from strategically placed windows. The location of the lab will allow for increased collaboration with university staff and students, as well as with the Alaska Coastal Rainforest Center and its director, Michael Goldstein, who will be co-located at the laboratory.

Guests at the presentation included Mayor Bruce Bothelo, Connie MacKenzie from Congressman



Asst.
Station
Director
Paul
Brewster
points out
features
of the new
facility to
be built in
Juneau.

Young's office, Sally Smith from Senator Begich's office, and Steve Ignell from NOAA. Brewster was also gratified to welcome members of the Wooshekeetaan Tribe, the Native people whose ancestral lands encompassed the new building site. Plans are being made to recognize their history and heritage in the building. Ernest Jack of the Hoonah Indian Association echoed the feelings of other Tribal members by saying "We want to be part of the process."

Completion of Phase I is scheduled for January 2012.

Secure Rural Schools Act

Funding Schools, Roads and Projects that Benefit Communities and National Forests By Susan J. Alexander, Alaska Region Secure Rural Schools Coordinator

ince 1908, 25 percent of Forest Service revenues, such as those from timber sales, locatable and leasable mineral resources, and grazing fees have been returned to states in which national forest lands are located. In recent decades, with decreases in timber harvests on Forest Service lands, those revenues declined significantly. On October 30, 2000, the Secure Rural School and Community Self-Determina-

tion Act of 2000 (Public Law 106-393) was passed, and was set up to expire by September 30 2006. The Secure Rural Schools Act was intended to stabilize funding and transition to lower payments by providing assistance to affected rural counties. The intent was to provide time for counties that had depended on this funding for nearly a century find other sources of revenue. Many counties, particularly those with a high

percentage of Federal land, were unable to find other ways to support their services. In May 17, 2007, an emergency supplemental appropriation (Section 5401) extended PL 106-393 for one year. Under the October 2000 Act, the Forest Service paid out more than \$2.5 billion of revenue nation-wide over seven years. That law, with the extension, expired in September of 2007.

Congress reauthorized the Act in October 2008, extending the program for four more years. The reauthorized Act emphasizes transition payments for counties and accomplishing important ecosystem health

work on the ground, creating jobs and building relationships. While the reauthorized Act has the same purposes as the previous Act, it differs in several ways. Title I of the 2008 Act provides for predictable payments for states and counties containing federal land to help fund schools and roads. Title I differs significantly from the previous Act of 2000. It lasts for four years, and there is a new formula for payments to



This shelter was completed using Wrangell-Petersburg RAC funds.

states. Title II outlines a structure for special projects on federal land, and is largely unchanged from the previous Act. Title III focuses on county funds for specific purposes, and the 2008 Act significantly narrowed uses of these funds. Title IV includes definitions and miscellaneous provisions including a new calculation for the 25 percent payment.

The SRS Act gives counties the option between two payment methods. The payment options are a 25 percent seven year rolling average payment of receipts from national forest lands, or a share of the State payment calculated under the new

SRS Act. Boroughs or counties electing to receive a share of the SRS State payment and receiving over \$100,000 must allocate between 80 to 85 percent of the total funds to Title I (roads and schools). The remaining 15 to 20 percent is designated for projects under Title II and/or Title III.

Alaska received about \$22.2 million in 2009 and \$20.1 million in 2010 under the Secure Rural Schools

Act. Alaska will have nine resource advisory committees; two on the Chugach National Forest and seven on the Tongass National Forest, formed to advise the Forest Service on expenditures of Title II funds.

Counties and boroughs with funds for Title II projects work with the Forest Service to establish resource advisory committees (RACs). The RAC's duties include providing opportunities for interested parties to

participate in project development, review proposed forest management projects in accordance with the SRS Act, and make recommendations to the Forest Service. RAC duties have been expanded to include monitoring of project progress and making recommendations for appropriate changes to projects being monitored. It is the Forest Service's responsibility to ensure that RACs are balanced and diverse with equal representation from industry, environmental groups, elected officials and local people as outlined in the SRS Act, in addition to providing record keeping and other administrative duties.

Title II funds are used to make investments and create employment opportunities through projects that improve the maintenance of existing infrastructure, implement stewardship objectives that enhance forest ecosystems, and restore and improve land health and water quality. At least 50 percent of all Title II funds must be used for projects that are primarily dedicated to road maintenance, decommissioning, or obliteration; or restoration of streams and watersheds.

Title III funds may be used to carry out the Firewise Communities Program, develop community wildfire protection plans, and reimburse for emergency services paid for by counties and performed on Federal land (e.g. search and rescue, firefighting).

RACs established by the original SRS Act and in existence before September 29, 2006, have been reappointed by the Secretary of Agriculture to a new four-year term. The Alaska Region had three RACs on the Tongass National Forest under the original Act. Four RACs have been added on the Tongass and two on the Chugach National Forest, for a total of nine RACs in the Alaska Region. Previously existing RACs in Alaska include the Yakutat RAC, the Ketchikan RAC, and the Wrangell-Petersburg RAC, all on the Tongass National Forest. New RACs whose members have been approved by the Secretary of Agriculture include the Prince of Wales RAC and the Sitka RAC on the Tongass National Forest, and the Kenai Peninsula-Anchorage RAC and the Prince William Sound RAC on the Chugach National Forest. New RACs whose members are waiting approval include the Lynn Canal-Icy Strait RAC and the Juneau RAC on the Tongass National Forest.

Title II projects can be proposed by anyone by visiting the Secure Rural Schools at http://www.fs.fed.us/srs, or by contacting your local Forest Service District office. You can navigate to the RAC website from the Secure Rural Schools website. RACs must propose projects for all four years of funding by September 30, 2011.

RAC Funds Give New Look to Local Rec Sites

By Paul Olson, Trails Foreman, Petersburg Ranger District





Old Portage Bay Cabin built in 1967. Right: Cabin after it is refurbished via RAC funds. Photos by Jeff Robinson.

ne trail and two cabins were reinvigorated with much needed facelifts thanks to funds from the Wrangell-Petersburg Resource Advisory Committee (RAC). Following a two-year hiatus, the RAC was reformed in April 2010, and quickly began the process of ranking proposals. This spring the Petersburg Ranger District submitted two proposals that were approved by the RAC committee. The

first proposal focused on giving the Mitchell Creek trail a new and improved look.

The Mitchell Creek fishpass was first constructed in 1992, successfully establishing a Coho salmon population above the falls. During construction, a primitive trail was established to access the fishpass for maintenance. Because the pass is located on Kupreanof Island just off a mainline Forest Service road, the site soon attracted

local recreation anglers. Proving inadequate due to increased use, the trail was upgraded to gravel in 2005. Using fisheries funding and the labor of the Youth Conservation Corps crew to assist in the improvements, the trail provided access to the creek below the fishpass. Still, users were wandering from this trail and eroding the bank, making for unsafe passage.

cont'd on page 38

cont'd from page 37

Again responding to local feedback, the Forest Service began pursuing a new trail design. A plan was initiated to add a spur off the main trail which bypassed the eroded section and also provided access above the pass. The RAC approved the funding, and construction began in summer 2010, and is 95% completed. Additional funding is being provided through a partnership with the Petersburg Indian Association, which will address deferred maintenance on the road that accesses the trail.

This summer's upgrades included:

- Refinishing the gravel trail
- Constructing staircases and native wood steps
- Extending the original trail to provide better access for fishing.

Gravel and logs were harvested near the site, and all the lumber was harvested and milled locally in Southeast Alaska. Crew members involved with the project were Dave Nauman (Crew Leader), Jim Wilson, Cara Wigfield-Gorka, Jess Engle, Chris Hansen, Ben Freund and Tory DeAngelis.

The second proposal addressed improvements on the exterior of two district cabins. The Portage Bay Cabin, located 25 miles northwest of Petersburg by boat, was built in 1967 as an administrative site for For-

est Service timber layout crews. Twenty years later, it was converted to a public recreation cabin. Throughout its history, the Portage Bay cabin has not been one of the more popular destinations on the district; however, a dedicated public user "adopted" the cabin and convinced the Forest Service that it was worth keeping. Through this partnership and a resourceful cabin crew, the cabin has

been transformed over time. Although simple and utilitarian at the start, improvements have been made over the years, including: refinishing the interior furniture; installing a new door, windows and trim; and, adding front and side covered porches. Completing the look, this project focused on the inadequately covered exterior, which has now been transformed into beautiful board and batten. With these improvements, use of the cabin has increased over time.

The Spurt Cove Cabin, located on the mainland 18 miles northeast of Petersburg, is finally settling in after a couple of moves. Originally located at Spurt Lake over a mile from its current saltwater locale, the cabin is now nestled in a small cove on the north side of Thomas Bay. The cabin was transported by helicopter in 1982 onto a spruce log crib, which over time began to decay. The cabin was again moved onto a new concrete foundation in 2001. The multiple moves created gaps in the siding and a drafty interior. Again, through RAC funding, board and batten siding was installed this summer to better insulate the cabin and provide the exterior with a new look. Next summer, new steps will be constructed



Completed Spurt Cove Cabin



New steps at Mitchell Creek Trail. Photo by Jim Wilson.

on either side of the porch and the roof will be extended over the porch.

Both cabin projects involved the five-person Petersburg Youth Conservation Crew, consisting of Hannah Meucci (Crew Leader), Trent Toland, Danielle Torrence, Brittany Fonseca and Louise Jackson. The cabin maintenance crew consisted of Jeff Robinson (Cabin Crew Leader), Ben Freund and Tory DeAngelis. The Petersburg Ranger District is proud to maintain local partnerships to bring about change to recreation

cabins and trails. Thanks to help from interested parties providing feedback and getting involved, organizations like the Petersburg Indian Association, local mills and alternative funds like RAC, we were able to respond and provide an enhanced experience on our forest lands.

For more information, contact Paul Olson at:

polson01@fs.fed.us (907) 772-5947.

Mystery Solved: Lassie and Friends

By Teresa Haugh, Editor

Notes, I asked for anyone who could identify the employees in this 1968 photo of Lassie in Juneau, to please let me know. I'm glad I asked. Not only was this mystery solved, but I also received updates on the lives and times of several retirees that we haven't heard from in a while. For the record, Kaye J. Metcalf is on left side of the photo, and Jack C. Culbreath on the right.

Thanks to Veronica Rudolph for identifying the young man in the photo as Jack Culbreath's son. She included the interesting tidbit that the young star of the Lassie television show was prohibited by contract from being lowered onto the boat via helicopter. Jack's son was made up to look like the star so he could act as the stand-in for that scene.

I was also happy to hear from Arvin L. White and Chuck Williams, who talked about Williams' work as the Forest Service technical advisor on the Lassie television show. Williams' job was to make sure the producer, director, and writers got the technical details correct dealing with fire prevention, grazing, and recre-



The mystery is solved. Pictured above with Lassie are Kay J. Metcalf (l) and Jack C. Culbreath (r). The boy on the boat is Culbreath's son.

ation sites. Williams credited the Lassie show with promoting public awareness of the environment.

Williams and his team were also involved in the birth of another American icon: Woodsy Owl. Since Smokey Bear's message is that of fire prevention, a new symbol was needed to address the growing con-

4 * 6 * 6 * 6 * 6 * 6

cerns of environmental pollution. The team decided that an owl could represent both forested and urban areas. Williams had grown up hearing his mother complain to seven children that, "you kids don't give a hoot." Williams turned that into Woodsy's now famous motto, "Give a Hoot, Don't Pollute."



Thanks are extended to retirees John C. Raynor, Jim Webb, Tom L. Thompson, Peter Neyhart, Veronica Rudolph and Gene Chelstad for identifying the men in the photo with Lassie. It was nice to hear they are reading and enjoying *SourDough Notes*, and some shared of their experiences working in the Alaska Region and what they are doing now.

Jim Webb said he worked in the Regional Office from 1962-66, and

he and his wife were friends of the Metcalfs. "We wouldn't take anything for our opportunity to live and worth with many fine people in your region," he said. "Our son was born in Juneau."

Tom L. Thompson, who also sent a note, retired as Deputy Chief of the National Forest System. He started his career with the Forest Service in 1968 on what was then called the Chatham Ranger District in Juneau. He worked on the Chugach National Forest and at the Institute of Northern Forestry. His wife Kaye worked as a naturalist at Mendenhall Glacier Visitor Center and was one of the first naturalists on the Alaska Marine Highway Ferry System. Tom is currently serving on the board of the National Museum of Forest Service History.

This exercise was so much fun, we are going to do it again. If you would like to participate, please see "From the Archives" on page 41.

Cordova Ranger District Gives an Old Trail a New Face

By Ashley Marjanen, Forestry Technician, Cordova Ranger District

aving just graced the city streets of Cordova, the first snow of this autumn season reflects the closing of another season, the 2010 field season. Such is the case, at least, for the district's trails program: field gear and equipment have been cached in their designated winter resting places, dutifully awaiting year-end maintenance and inventory; seasonal trail crew members have signed their final time sheets of the year and said farewell to the chainsaws, Pulaskis, and myriad tools with which they spent the summer atop Sheridan Mountain and up the Copper River; and Sheridan Mountain Trail now waits in quiet as its reconstruction came to rest with the passing of another productive fiscal year.

Roughly three miles in length, Sheridan Mountain Trail is a designated 17(b) easement route. Following passage of the Alaska Native Claims Settlement Act (ANCSA) in 1971, and the subsequent formation of 11 Alaska Native Corporations themselves consisting of village corporations—the Eyak Corporation of Cordova became the proprietor of nearly 149,000 acres of land that had previously been public lands. In effect, some areas of public lands national forest lands, for instance have become isolated and made inaccessible to the public as a result of such conveyances. Notwithstanding, section 17(b) of ANCSA prescribed the installment of easement routes to enable public access to public lands by permitting travel through and across lands that are privately owned. Given that Sheridan Mountain Trail was already in existence, it was reasonable to declare it a 17(b) easement route fundamentally managed for the purpose of providing



The Cordova Ranger District crew carves out a major reroute of the trail.

access to Chugach National Forest lands that lie beyond and adjacent to privately owned Eyak Corporation property.

According to district records, Sheridan Mountain Trail was first created in the early 1930s and appears to have been traveled primarily by hunters in pursuit of *oreamnos americanus*, the alpine ungulate otherwise known as a mountain goat. As one might imagine, the trail was unremarkable, a primitive pathway that cut through some two miles of spruce and hemlock forest interrupted by muskeg meadows before reaching timberline and entering an alpine ecosystem.

In the years following its inception, the trail has also come to attract recreation enthusiasts compelled not only by a heart-pumping climb of 2,100 feet to ridge line, but by beckoning views of Sheridan Glacier and the Copper River Delta, prospects most impressive and best experienced on a clear day.

Following the 1970s, budget constraints have accounted for limited and inconsistent maintenance of the trail. Being that this region of the Chugach National Forest is characterized by prodigious precipitation, the trail is especially susceptible to degradation from runoff, erosion,



One of several split log bridges fashioned from native hemlock.

and other natural factors. Taking into account the combination of omnipresent moisture, increased recreational use, and the backlogging of routine maintenance, Sheridan Mountain Trail, undoubtedly, was due for a facelift. Reconstruction of the trail commenced in 2009, a project that continued into 2010 as the primary focus of the trails program here on the district.

Under the direction and supervision of Dave Zastrow, trails coordinator on the Cordova Ranger District, the reconstruction project has rendered significant improvements on Sheridan Mountain Trail, enhancing both the trail's navigability and aesthetics. Managed as a class 3 trail, some sections remain relatively rugged and minimally developed while others have received substantial modifications and installments: gabion bridges, Wrangell stair cases, step-and-run, split log bridges, re-routes, switchbacks, and rock steps-in one instance, a rock staircase. Though native materials retrieved on site were desirable, some pre-manufactured resources were employed, a major component being pressure-treated boards used

for step-and-run across sections of marshy muskeg or soft, muddy tread prone to the accumulation of standing water.

As 2010 trail crew member, Andrew Deaett, asserts, "The trail provides public access to paramount alpine environments."

Though maintenance and construction remain essential to continued management of the route, the revamp has served to improve the trail's integrity while maintaining a satisfying challenge for those who seek access to and experiences of the spectacles afforded by a venture to the heights of Sheridan Mountain.

In the end, all of the work achieved on the trail is the result of time and many working minds and hands. Though Forest Service trail crews bore the brunt of the work, the 2009-2010 reconstruction and maintenance project also enlisted



Jonah Dart-McClean and Ariel Rolfe manipulating and arranging rocks into steps to keep hikers clear of mucky holes that can swallow a foot.

the efforts of Conservation Corps members of an Alaskan non-profit organization known as SAGA (Southeast Alaska Guidance Association). Cheers to partnerships, hard work, and the pursuit of adventure.



From the Archives

an you identify these three Forest Service employees? If so, please send let me know. A list of everyone who has the correct answer will be published in the next issue of *Sour-Dough Notes*. We will give extra kudos to those of you who can identify their job titles, as well.

Please send a list of names, from left to right in the photo, to: .

Teresa Haugh, Editor E-mail: thaugh@fs.fed.us or U.S. Forest Service Public Affairs Office P. O. Box 21628 Juneau, AK 99802

Helpful hint: This photo was taken in 1981.



Kenai Peninsula Borough Spruce Bark Beetle Hazardous Fuels Mitigation and Reforestation Project

By Gary Lehnhausen, Fire Safety & Training Specialist, State & Private Forestry

wenty-one communities across Alaska's Kenai Peninsula Borough are rated at extreme risk for wildland fire. Through the 2005-2009 All Lands/All Hands program, community wildfire protection plans (CWPPs) were developed for these at-risk communities. Landowners currently in these CWPP areas express that one of their major wildland fire concerns is the hazard created by the presence of grass fuels.

This concern escalated during the spruce bark beetle outbreak of the 1990s. The death of mature spruce trees results in the loss of canopy cover. This in turn allows more light to reach the forest floor, promoting the abundant growth of native bluejoint grass (Calamagrostis Canadensis).

The most destructive wildfires on the Kenai Peninsula get started or spread in bluejoint. This grass forms root mats and thickets so dense that trees and other plants cannot get

established. It reproduces both vegetatively (through its roots) and through seed production.

Bluejoint can cover large tracts of land for relatively long periods of time and can reach heights of six feet or more. When burned, it can produce flame lengths of ten to twenty feet, and more, if downed dead woody fuels are present. Fire can travel through blue grass at over three miles per hour with a little wind, and that is an extremely fast rate of spread



Alaska Department of Forestry crews select spruce trees with the best forms and most cones.

among forest fuel types. It responds rapidly to changes in relative humidity, and it can carry fire almost any time of the year, if it's not covered by snow.

Bluejoint is one of the most common and widespread tall grass species in North America. It can be found from Labrador to Alaska and south to the mountains of North Carolina, New Mexico and California. It grows very well



After felling trees, cones are handing picked and placed into burlap sacks for transport.

at sea level in the North and Northwest, and it can be found at elevations over 12,000 feet in the mountains of New Mexico. For this reason it is a difficult species to treat and control. With funding provided by the American Recovery and Reinvestment Act, the Kenai Peninsula Borough Spruce Bark Beetle Mitigation Program (SBB) cooperators are addressing this concern.

Agency partners—including the U.S. Fish & Wildlife Service, Chugachmiut, and the

Alaska Division of Forestry—created a research project to evaluate different types of treatments that can be used to reduce native bluejoint grass growth. A systematic design was established where treatments will be applied and tested against control plots over a four-year period. The goal is to provide tried and true methods to deter grasses that can be applied by local landowners. The SBB is taking the lead on devel-

oping the plots and completing the first series of applications. Each member of the *All Lands/All Hands* fuels treatment committee will be taking responsibility for successive seasonal actions required for the project, and will share their findings with the group.

ARRA funds are also being used to reduce hazardous grass fuels on a boroughwide landscape level. This fuels-reduction project involves searching SBB vegetation management database records to find parcels



Sacks of cones are stored at the Kenai-Kodiak Area until transported to Palmer. Adequate ventilation helps prevent heating and opening of the cones.

otherwise covered with grassy fuels. More than 220 parcels were located, covering some 5,100 acres. Borough foresters evaluated each parcel and developed reforestation prescriptions for them. The goal of this project is to convert these parcels from grass- dominated vegetation to tree stands. This would reduce the risk of wildfire significantly.

Reforestation using seedlings grown from local seed sources will increase the success rate of establishing tree stands where grass had been the dominate vegetation. Alaska Department of Forestry crew members collected 56 bushels of spruce cones from which 4 million seeds were harvested. These seeds will provide seedlings for reforestation efforts for the next 15 years. As landowners authorize their parcels to be reforested, the seedlings will be grown at the DOF nursery in Palmer, Alaska, and shipped to the Kenai Peninsula for planting each spring.

iTREC! (Iditarod Trail to Every Classroom) Teacher Training

By Jaime Schmidt, Trails Program Leader, and Annette Heckart, Interpretation Specialist

he Chugach National Forest's iTREC! (Iditared Trail to Every Classroom) is a teacher training program modeled after the

Appalachian National Scenic Trail's TTEC program (Trail to Every Classroom). The objectives of iTREC! is to train teachers in the concepts

of place-based service learning as they integrate the outdoors, public lands, natural and heritage resource conservation, and the Iditarod National Historic Trail into their curriculum. The program is designed to foster students' understanding of their local landscape and community, and inspire them to be involved in long-term stewardship of our natural and cultural resources.

Partners include the Iditarod Historic Trail Alliance, the Appalachian Trail, the Bureau of Land Management, and Alaska Geographic. Seventeen teachers from Seward to Nome and

points in between—including Galena, Unalakleet, Anchorage, and Cordova—are enrolled for the 2010-11 school year.

A summer institute held in Girdwood, Alaska, August 1-5, 2010 served as the kick-off event.

The participating teachers, with classes ranging from kindergarten to 12th grade, are already engaging some 1,000 students in sustained placebased service learning along the Iditarod Trail and throughout Alaska. A follow-up workshop was held November 5-7 in Seward, and another is scheduled for April 15-16, 2011 in Nome, as the first round of teachers complete the year-long accredited training program. These two-day workshops are aimed at providing the inspiration, knowledge and skills to transform classroom teaching into effective and exciting placed-based education and service learning.

Other teachers from schools along the Iditarod Trail may apply to participate in the program upcoming school years by contacting Annette Heckart (aheckart@fs.fed.us).



iTrec! teachers hike the Iditarod Trail.

Pack Creek Viewing Tower Gets a Facelift By Harry Tullis, Lead Wilderness Ranger, Admiralty National Monument, and Teresa Haugh, Editor





Left: Daven Hafey and Dori Broglino replace shingles on the Pack Creek Viewing Tower. Right: Harry Tullis and Don MacDougall ferry a long ladder via canoe up Pack Creek.

Thy don't we just ferry the supplies up the creek in the canoe?" asked Pack Creek Ranger Dori Broglino.

A brilliant, if obvious, solution to our problem of collecting enough materials to repair the Pack Creek Viewing Tower on Admiralty Island. The original platform had been built by the CCC in the 1930s and reconstructed in 1990. However, it had been rapidly aging ever since. In late summer 2009, staff noticed a hole in the peak of the roof that had been accumulating needles and moss for the past 20 years. The shingles would have to be replaced.

Before the roof repair could begin, however, I had to put in a request for fee enhancement money. Recreation Planner Mike Dilger helped me calculate material costs. Don MacDougall, the Pack Creek Crew Leader, designed the scaffold and purchased the materials. Then, he researched the courses needed by the crew to meet OSHA safety requirements. The workers welcomed OSHA's requirement for the project to have scaffolding and for each crewmember to wear a harness. No one wanted to experience a 20-foot fall! The fabrication of the scaffold required extra time but was well worth the effort.

Once the request for money was approved, the staff began planning logistics and purchasing materials. Each crew member completed the required on-line safety courses on ladder safety, scaffold safety and fall protection. After their arrival at Pack Creek, the crew began transporting tools and materials to the work site. The original plan was to pack all the tools and materials up the trail, an endeavor which was likely to take several days and an enormous amount of physical exertion. Thankfully, we were able to avoid that fate when Broglino suggested using the canoe.

After a week of cooperative weather, the project was completed without incident. The tower and its visitors are now protected by a new roof which will last for several more decades.



Don MacDougall, Lead Ranger at Pack Creek on Admiralty Island National Monument, builds a scaffold on the bear viewing platform so the roof can be replaced.